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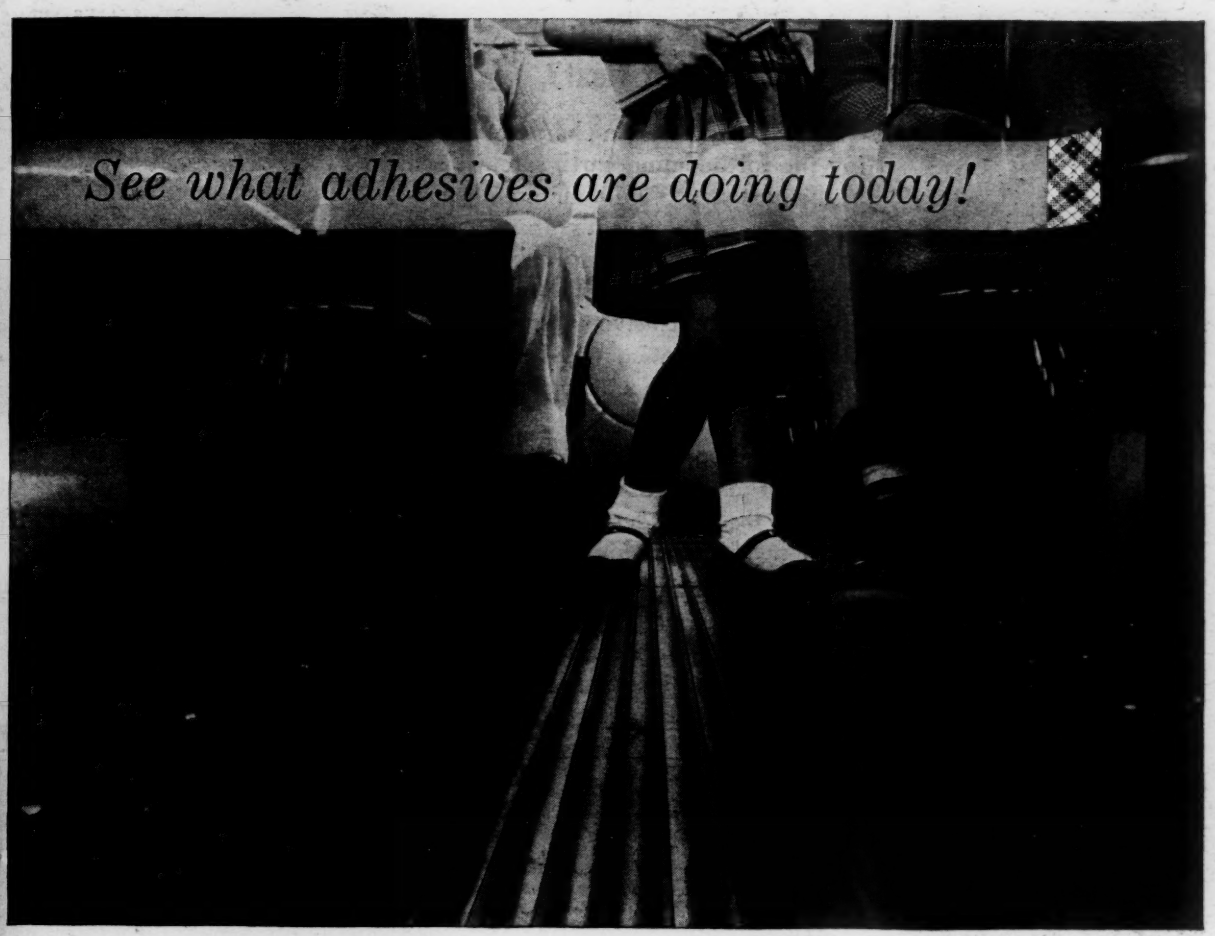

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IN THIS ISSUE

★ After the Satellites: Is Space Flight Next?

What do the men in charge of building the forthcoming earth satellite see as the next step? Could man really survive outside the earth's atmosphere? Just what is being sought by use of satellites? Here are the answers as given in an exclusive interview with three of the scientists who head up the U. S. satellite project. Page 66.

★ How Visiting Russians React to Life in the U. S.

To find out how touring Soviet officials really react to life on capitalistic farms, *U.S. News & World Report* sent a Russian-speaking expert to accompany them. Here's his report. Page 37.

★ Is Now the Time to Buy a New Car?

Can you get real bargains in the new-car market now? Will prices later in the year go up or down? What's really going on in the industry this summer? For a special report, see page 50.

★ Contents

March of News 4
Tomorrow: A Look Ahead 7
Washington Whispers 10
People of the Week 12
*Where Polio Vaccine Helps 17
How to Enlist for Six Months 20
New Laws That Make Life Different 21
It's Harder to Buy a House 24
Deal Cooking With Red China? 27
Ike Talks About Peace, Red China 28
U.S. Ahead in "Atomic Olympics" 30
One More Measure of How Far Reds Can Be Trusted—Released Fliers' Story 32
What Soviet Visitors Really Think of U.S. 37
Despite Peace Talk, Defense Costs Stay Up 40
Worldgram 43
The Man—The News:
Sherman Adams—Ike's Silent Partner 46
Is This a Good Time to Buy a Car? 50
We've Been Asked:
About Service for Veterans 57
*Story of "Push Buttons":
Latest on New Weapons—
Interview With Donald Quarles 58
ABC's of Travel in Space—Moon Next?
Interview With Space-Satellite Experts 66
The End of the Talbott Story:
Letters of the President, Secretary 72
News You Can Use 75
Reds' Game in Asia Now—Interview With K.C. Wu, Former Governor of Formosa 78
Plus and Minus:
Indicators of Business Activity 85
Labor Week:
Automation Hits Snags in Britain 86
Trend of Business 91
Republican Senators Debate Ike's Policy:
"Success" or "Failure"—In Text 94
Memo From Japan 98
Finance Week:
Where Profits Are Gaining Most 100
News-Lines for Businessmen 102
Business Around the World 105
David Lawrence Editorial 108

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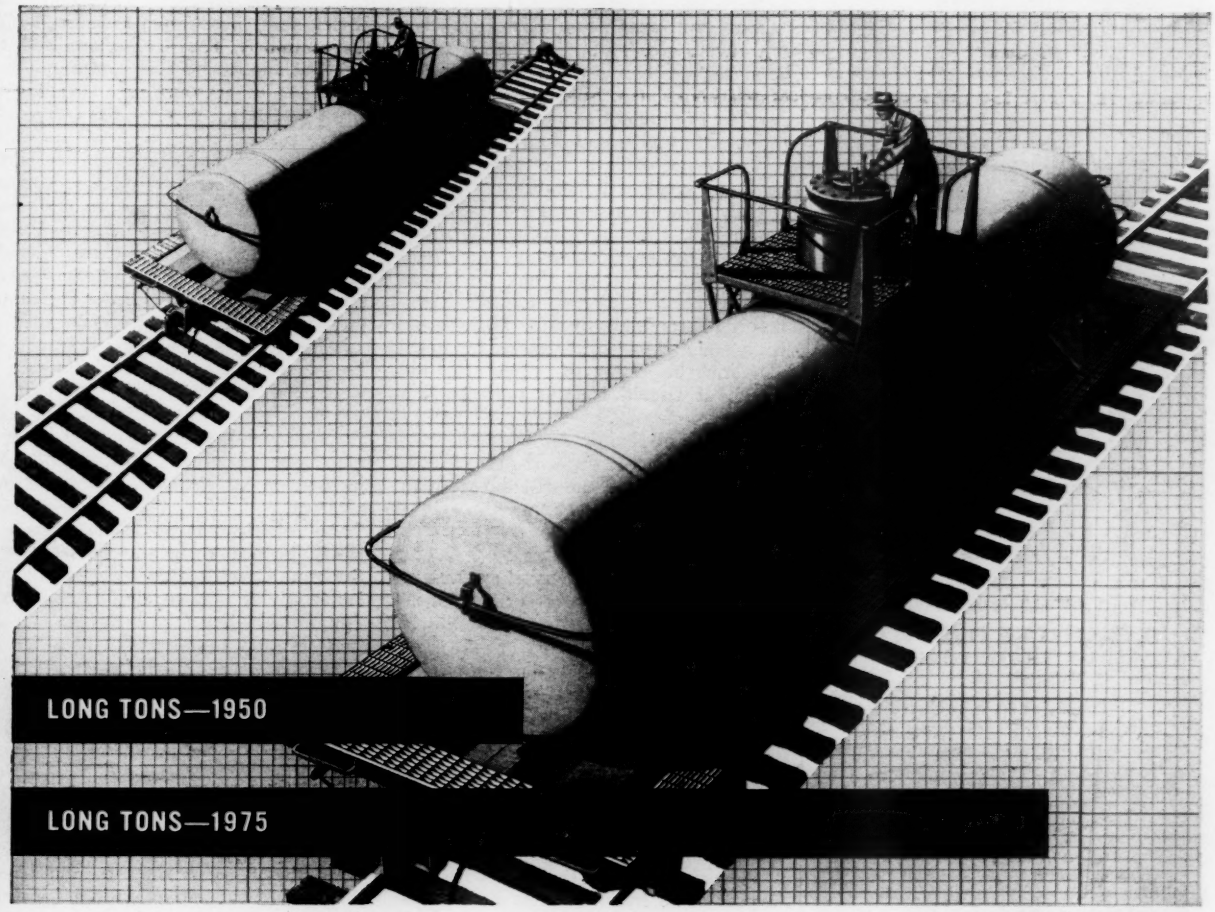
H_2SO_4...how many carloads in 1975?



Sulfuric acid (H_2SO_4) is the largest volume product of the chemical industry. Demand for it should increase from 3,735 thousand long tons in 1950 to an estimated 8,459 thousand long tons in 1975* . . . an increase of 126%.

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The March of the News

"NYET"? OR "MAYBE"?

AMID THE DEAFENING APPLAUSE that always greets a Soviet Premier when he makes a speech to the Supreme Soviet, Marshal Nikolai A. Bulganin gave an answer to President Eisenhower's startling proposal to exchange military secrets:

"I do not believe the proposal can have any great, real significance."

Only a few hours later, President Eisenhower talked about Marshal Bulganin's speech at his news conference. Mr. Eisenhower said he did not think the Soviet Premier had closed the door on the Eisenhower plan, adding that the U. S. would have some new ideas on disarmament and arms inspection to present late this month at United Nations talks in New York.

Next day, Bulganin amplified his statement, declaring it did not mean Russia would not examine the Eisenhower plan.

FROST ON THE COFFEE

WHILE U. S. HOUSEWIVES SWELTERED in August heat, subfreezing weather in Brazil was brewing more trouble for their grocery budgets.

A killing frost hit Brazil's coffee plantations. Mature coffee berries now being harvested were not hurt, but the freeze damaged the crop that is due to move from plantations to markets next July. A Government official in one of the major coffeegrowing areas said damage was worse than in the 1953 freeze that eventually hiked coffee prices sharply.

Best clue for what the housewife could expect came from the New York Coffee and Sugar Exchange, where much of the coffee used in the U. S. is bought and sold. For three straight days after news of the freeze, prices on coffee to be delivered out of the next crop rose 2 cents a pound each day—the maximum permitted by exchange regulations.

MORE SOVIET BOMB TESTS

THE RUSSIANS are running new tests with atomic, and perhaps hydrogen, bombs. These are the first tests of Soviet atomic weapons to be disclosed since a series of explosions was confirmed by the U. S. Atomic Energy Commission last October.

This time the AEC said:

"Within the past few days, the Soviets resumed testing of nuclear weapons. This may mean the beginning of a new test series."

Previous public announcements have credited the Soviet Union with firing 11 shots to test atom and hydrogen weapons. U. S. officials say the actual number of Soviet shots probably is almost double that number. The U. S. has fired 65 publicly announced test explosions.

TREKKING TO RUSSIA

THE IRON CURTAIN around the Soviet Union is being pierced this summer by more Americans than in any other year since end of Lend-Lease to Russia.

Seven U. S. Senators have definite plans to go to Moscow in September, after a meeting of the Inter-Parliamentary Union in Finland. Some plan to take their wives along. The former Vice President, Senator Alben W. Barkley, of Kentucky, thinks he may go, too. Altogether, there were indications that Russians would issue about 10 times as many visas this year as the 40 or so they have given Americans in most years since the war.

An American farm delegation has already been touring the Soviet Union. Supreme Court Justice William O. Douglas is on his way to climb some Soviet mountains. Several businessmen are getting entry permits. The Iron Curtain is still in place—but the gatekeepers are getting a little more liberal.

A RECORD FOR LIVING

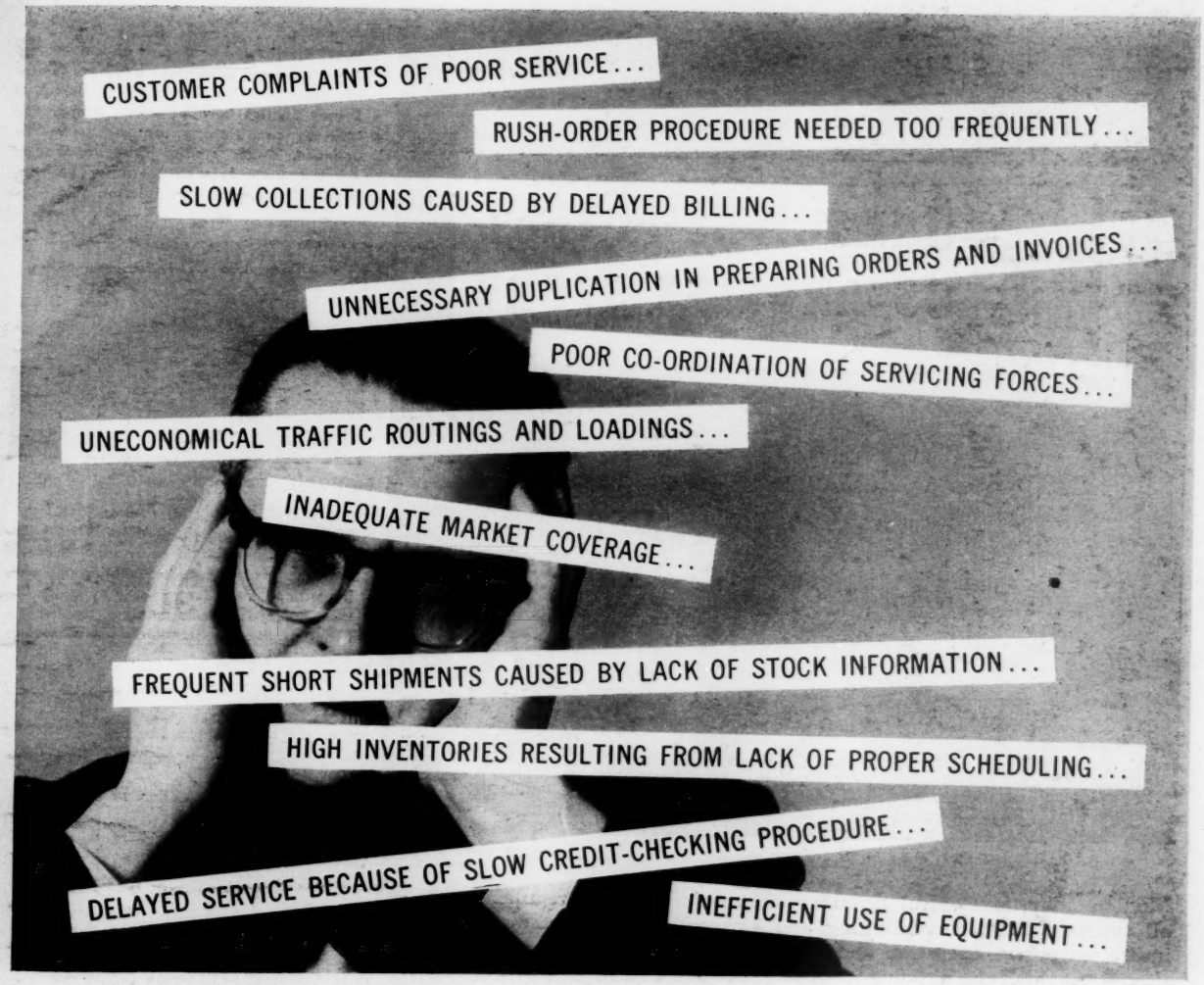
THE FIRST SESSION of the 84th Congress set a record that pleases all the 531 Senators and Representatives: There were no deaths during the session.

In the 27 years since current records began to be compiled, there has never before been a year without a death. Lowest previous death toll was in 1943, when three Representatives died. The most lethal year was 1937, with 21 deaths.

DOLLAR-A-YEAR RULES

BUSINESSMEN WHO WORK for the Government without pay—the so-called dollar-a-year men—face new restrictions.

One of the last bills passed by Congress before it adjourned required these unpaid aides to file for publication a statement of their business and financial interests, including stocks they own. Many of these men are loaned to the Government by their employers. The idea behind the bill is to see whether the officials act to their own financial benefit while working for Government. Whether dollar-a-year men will continue easy to get for Government jobs remains to be seen.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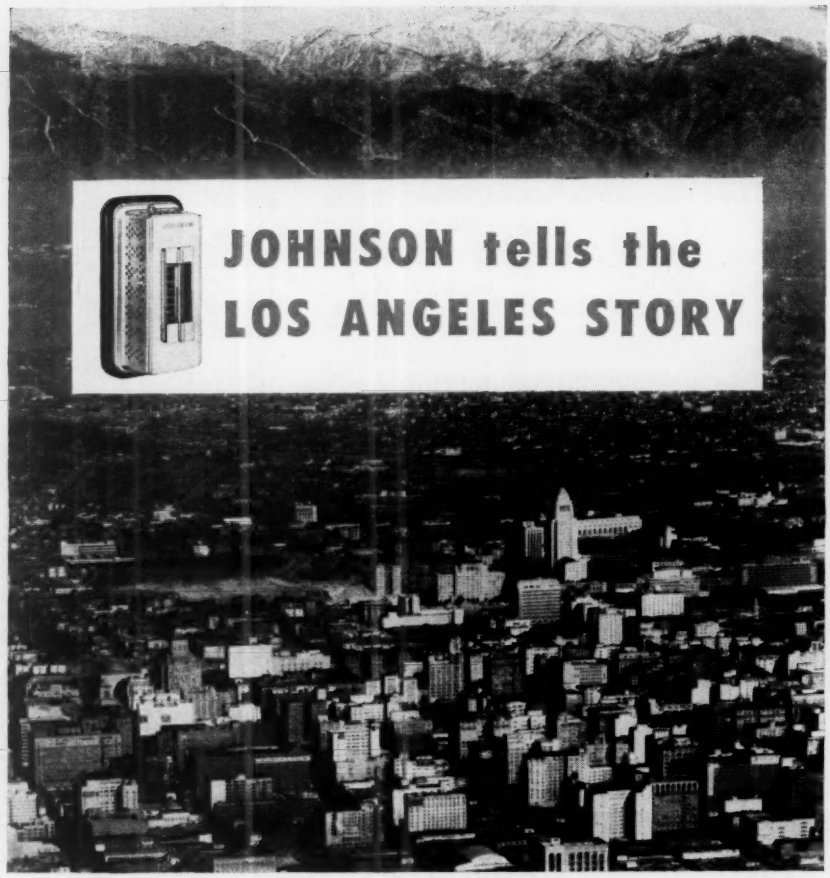

WALT DISNEY and production director Wilfred Jaxon go over storyboard on Disney's new hit, *Lady and The Tramp*. All buildings at Disney Studios have automatic temperature and air conditioning control systems by Johnson. Other studios that depend on Johnson Control include Warner Brothers, M-G-M, Universal and Technicolor.

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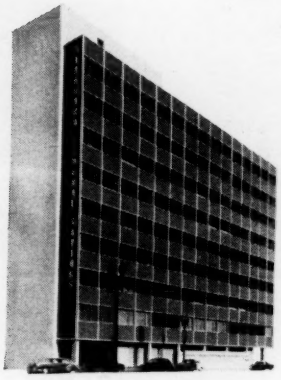

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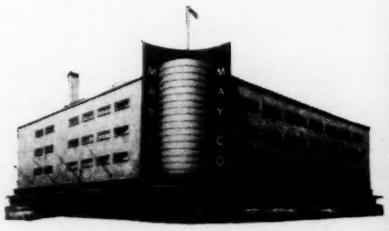

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A LOOK AHEAD

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Brakes, mild but firm, are to be applied to the boom. Braking moves, made to date, are just the first. There'll be others if these do not work.

Boom slowdown, more calm, less exuberance are the objectives.

Readiness of people to borrow too freely is one official worry. The tendency of business to borrow to build inventories is another. Stock-market rise--regarded as too rapid--is one more.

Tightening, well under way, will be aimed at money.

Does this mean "hard" money? It's doubtful. If you borrow to buy or build, money will cost a little more, but not much. Lenders, mostly banks, will have a little less money to lend, will be more choosy in lending.

Will this hurt business? It's very doubtful. What will it do? It is most likely to slow the rate of rise somewhat. It'll put a moderate brake on the expansion of mortgage credit. What about installment buying? Costs will be a bit higher, but customers with bigger income to mortgage may not care much.

Is something more drastic in the wind? Probably not, unless there is a tendency of people to fight the money controllers. If they do, then stronger moves are almost sure to be made. The idea is to slow the rise.

What about the stock market? Officials want to check the rise there, too. Tendency of stocks to rise, for speculation to increase in the face of restraints on credit use, is the cause of some official worry.

Does that mean more restraints? It does if speculation rises, if there is a tendency to ignore Government authorities. They want things to calm down, not to gyrate so much, not to develop a hectic appearance.

Is this to be like 1953? No, not if that can be avoided. Then, money really did get tight. Officials think they learned a lesson that time. Now, there will be more caution. What about a policy reversal? It is likely to come fast if the boom gives any sign of turning into a recession.

Actually, there are very strong forces at work on the side of a rise in business. The most to look for is some moderate restraint on that rise.

Why the move to put on brakes now? Because some high officials fear that delay will mean a really big boom followed by a big bust. Also, a check to the boom now will be expected to prolong high-level activity through 1956. Continuing boom, unchecked, might bring an upset before November, '56, election.

Just what is the big idea? It is simply that the way to prevent a big depression is to keep a boom from going too far too fast. Was the boom going

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too fast? The President was sold on the idea that borrowing had reached too fast a clip in the field of installment credit and mortgages in particular.

Are all top policy makers agreed on dangers? No, they are not. The most concern is in Treasury and Federal Reserve Board. Most top economists of the Government saw little ground to worry. Why? They doubted that forces of inflation were really becoming dangerous, that the boom was getting out of hand. There's still unemployment, still excess capacity in many fields, still trouble for farmers, still no real rise in the over-all price level.

Economists argued that wage rises were largely being taken up by a rise in efficiency; that upward pressure on the general price level was not great. Policy makers, however, refused to be complacent, insisted on starting to tighten up on money, to make it a little harder to borrow.

Is the stock market too high? That's anybody's guess. There seems to be agreement that stock prices are at a level that suggests at least the need for caution. There is some opinion that a good many stocks have discounted any probable expansion in earnings and dividends. Others, at the same time, may be undervalued. Government appraisers show clearly that they are concerned about the rate of rise in the stock market, about tendency for some stocks to make wide swings upward and downward in a short period.

The official goal is to encourage caution, even hesitation.

There is always this to keep in mind, too: It is just a year to 1956 party conventions, to the time when a presidential campaign gets going.

Eisenhower, unless most signs are wrong, will accept a draft. Nixon, as of now, is the most probable choice for second place on the ticket.

Stevenson is not as fully accepted by top Democrats as the party choice as he was a while back. There may be a real scramble among Democrats.

Strategy of the Democrats as they face up to a campaign year is this:

Try to avoid the appearance of fighting Eisenhower. Build local issues. Then, if Ike runs, try to keep a hold on Congress by exploiting interests of local groups who may be disgruntled--farmers, public-power groups, others.

Hammer away at the theme that Eisenhower may be all right but that he is the "captive" of big business, of the "interests." That's the basic theme the Democrats are working and will continue to work in months ahead.

Then, if Ike does not run, strive to make the issue: The "interests" vs. the "common man." If Eisenhower does run, Democrats probably will expect him to win almost by default. They will put emphasis upon control of Congress.

A wide variety of "good things" almost surely will be offered to voters by Congress in 1956. Tax cut is one of these. Lowered retirement age for women is another. Tax deductions for professional people building private systems for retirement is one more. Aid for school building is still another.

Pressure groups will expect big things in the election year.

In the session just ended, Congress took care of the big voting group employed by Government. It voted 1.3 billions in pay raises, plus improved pension benefits. Very many local projects involving public money were acted upon favorably, too. The temptation is to try to make everybody happy.

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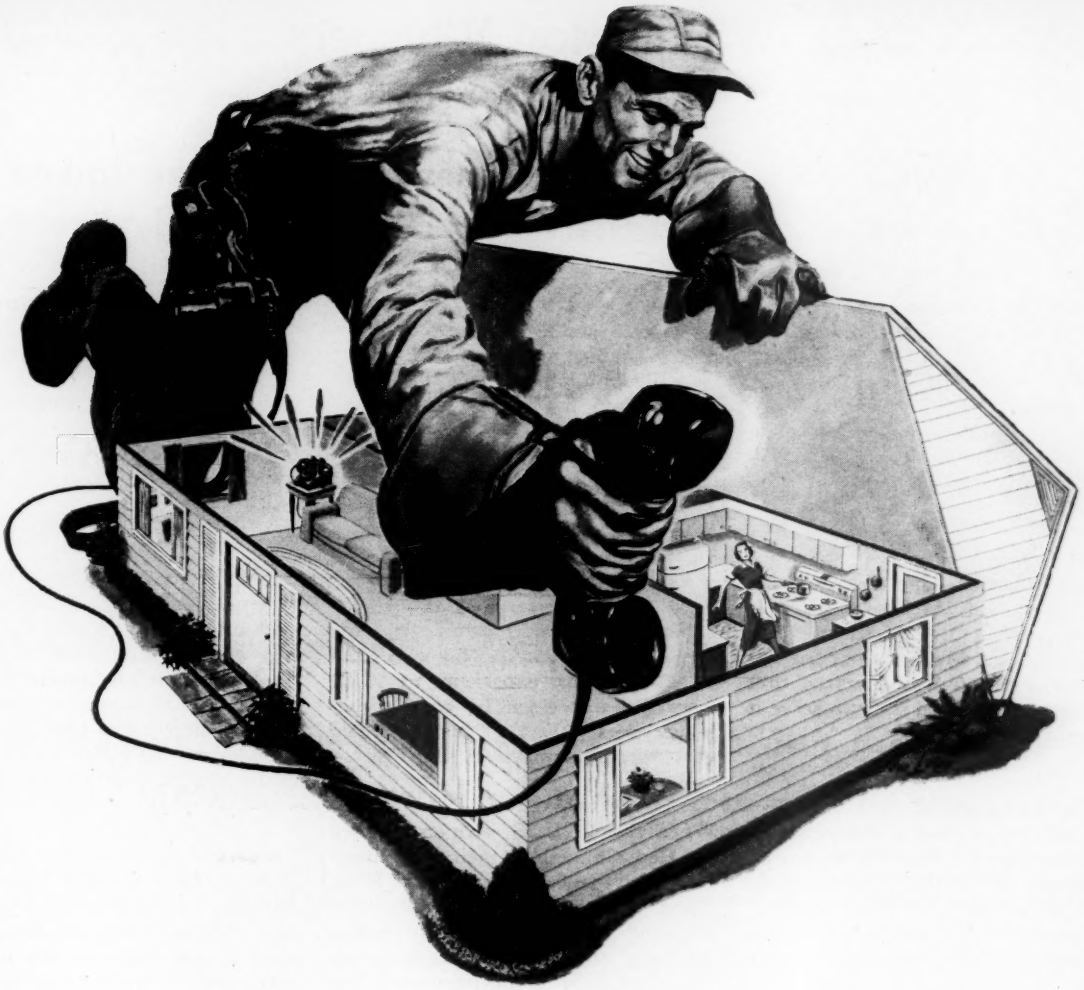

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[Items appearing on this page are reported in Washington and other news centers]

Bulganin's View: Victory at Geneva . . . Why Ike Talked About Age . . . Freed Fliers Muzzled to Save Reds' Face?

President Eisenhower had a purpose when he remarked to visitors that no man in history has reached the age of 70 in the Presidency and that the office brings "physical erosion." Ike wants to rekindle some uncertainty about his willingness to accept a 1956 draft, an uncertainty that had been fading.

* * *

George Allen, one of the President's closest friends, is reported to be convinced that Mr. Eisenhower will balk at a 1956 draft. Most of Ike's friends, however, are equally convinced that he will regard it as a duty to serve if drafted.

* * *

A story being spread that the President will insist that a Democrat be nominated for the Vice Presidency on any ticket he heads is described by White House aides as "pure fantasy." One party simply does not open the way for the opposition party to gain power by default in the event that anything should happen to the President.

* * *

Richard Nixon, Vice President, is beginning to be shot at by some elements within the Republican Party. Odds as of now, however, are strongly on the side of renomination for Mr. Nixon in case Ike accepts a draft.

* * *

It is being recalled that, in the past, President Eisenhower had expressed the view to visitors that age is not so important as it once was in deciding how long a man should pursue an active life. He remarked that people now live to older ages and are protected against many ailments.

* * *

Nikolai Bulganin, Soviet Premier, who now claims that his meeting with Eisenhower resulted in a "victory for the peace-loving peoples" was really saying in Marxian dialectic that the Communists were victors in that meeting.

* * *

Georgi Zhukov, Soviet Marshal and Eisenhower's wartime friend—it now is reported by White House sources—did not open up much when he had a long personal talk with the President. Zhukov is described as "cagey." It is said, too, that V. M. Molotov and Andrei Gromyko, the two Russians with most experience in U. S., were not impressed by the "Eisenhower personality." They remained very suspicious of U. S. motives.

* * *

When the 11 U. S. airmen released by Red China had their first meeting with newspapermen in Hong Kong, a U. S. Air Force officer was on hand to keep them from saying anything unpleasant about the Reds who had held them prisoners. The assumption in Hong Kong is that the U. S. didn't want to embarrass the Communist negotiators now dealing with an American ambassador in Geneva.

* * *

Harry Truman, former President, and Dean Acheson, former Secretary of State, have expressed some wonder to friends concerning what would have happened to them if they had shown the friendship with Communist leaders that a Republican President is showing.

* * *

Randolph Burgess, Under Secretary of the Treasury, is credited with influencing present Government policy aimed at making money a little less abundant and a little less cheap. Top Treasury officials are more concerned about the possibility of revived price inflation than are Government economists.

* * *

It was the President himself who decided to make mortgage credit harder to get after high Government housing officials opposed the idea of tighter credit.

* * *

Coleman Andrews, Commissioner of Internal Revenue, is instructing his staff to stop referring to the Internal Revenue Service as IRS. Mr. Andrews does not want his service to become known as just another "alphabetical agency" and insists that in all correspondence it be called by its full title or by the title of Revenue Service.

* * *

Leaders of the Democrats in Congress plan to take a much more openly partisan approach in the 1956 session of Congress. Plans are being laid to draw sharp issues on tax policy, on farm policy, on other policies that affect large groups of voters.

* * *

Averell Harriman, of New York, is not counting himself out as a candidate for the Democratic presidential nomination next year, despite his statement in Ireland that he supports Adlai Stevenson. Close friends of the New York Governor say he regards the race as "wide open" and feels that Stevenson is currently losing ground.

* * *

Ezra Benson, Secretary of Agriculture, is under growing pressure to encourage the White House to ease policies that prevent sale of farm surpluses to Soviet Russia on a subsidized basis. Communist countries now must pay full price for U. S. products, where other countries often can get them at cut prices.

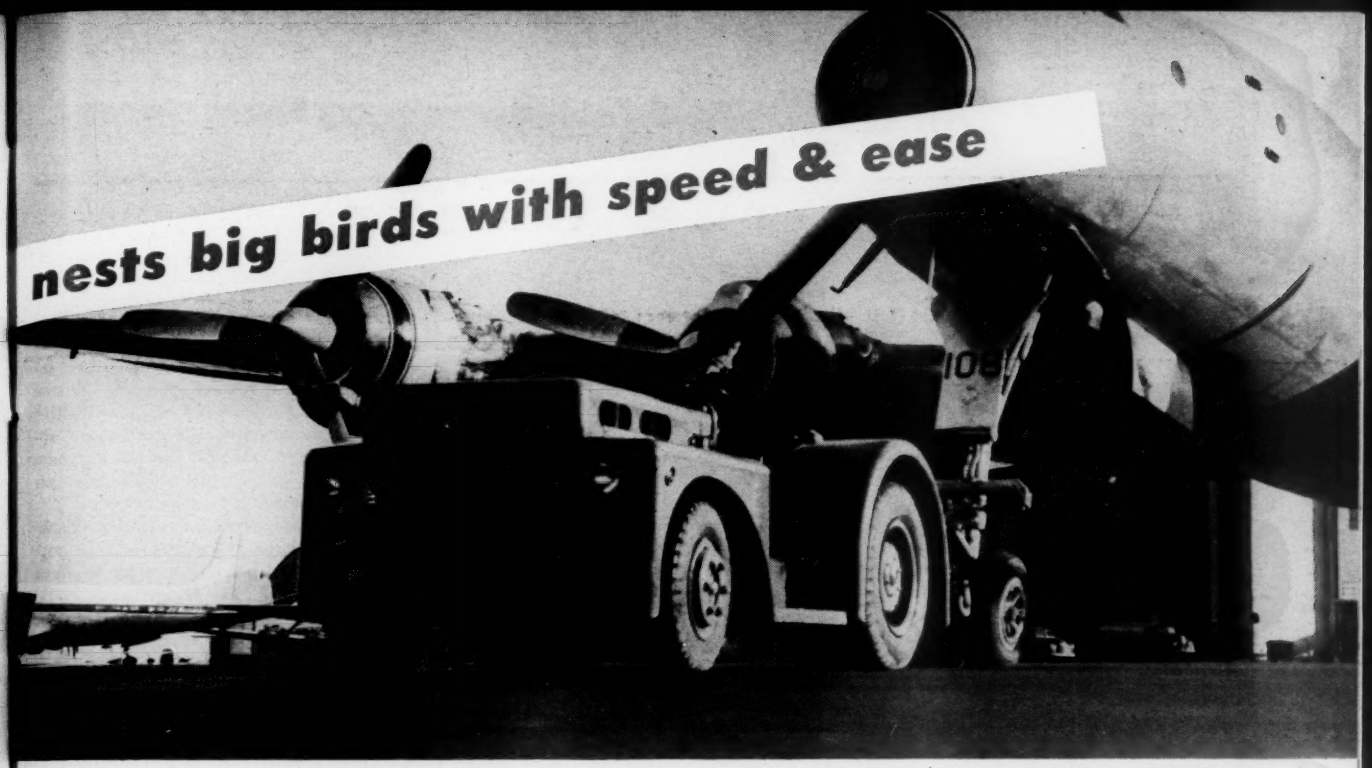


PHOTO COURTESY CLARK EQUIPMENT COMPANY, BATTLE CREEK, MICHIGAN

Clark towing tractor—with Chrysler power and fluid coupling—applies 12,000 pounds drawbar pull to big materials handling jobs

Here is materials handling—airport style. Chances are you've seen towing tractors pulling airplanes around airports all over the country without ever thinking of it as materials handling. It is though, and a mighty important type too. As planes become larger and airport space more critical, as schedules are stepped up and more flights are added, the job of keeping planes in the right places at the right times becomes an increasingly important factor.

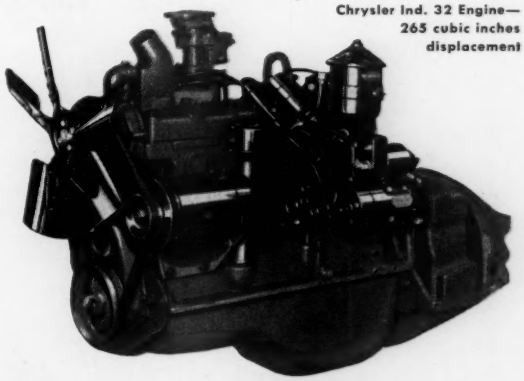
It is only natural that the airlines employ small, powerful towing tractors to do the job. Take the Clarktor 120, shown here towing a Constellation from unloading ramp to service point. The airlines know it can handle the job quickly and efficiently. It can apply 12,000 pounds of drawbar pull, if necessary.

The Clarktor 120, like all gas-powered Clark towing tractors, is Chrysler-powered. Chrysler Ind. 32, 265 cubic inches displacement engine drives the 120. And Chrysler gýrol Fluid Coupling connects engine and transmission, protects equipment, drive components and airplane from wear and tear of sudden starts and stops.

Manufacturers find it pays to power with Chrysler. Not only is it an industrial engine their customers recognize, it is also an industrial engine that assures maximum performance for their equipment, an engine that is factory-equipped to their needs. Gasoline, natural or L-P gas burning carburetors, vertical or horizontal magnetos, gýrol fluid coupling, 3, 4 or 5-speed transmission, and the New Chrysler Industrial Torque Converter—these and other equipment can be factory supplied to their order.

Manufacturers know too that Chrysler Industrial Engines are not expensive. Production-line methods adapted to specialized industrial engine building provide custom-built engines at mass-production prices.

See a Chrysler Industrial Engine Dealer for your needs. Or write: ***Dept. 48, Industrial Engine Division, Chrysler Corporation, Trenton, Michigan.***

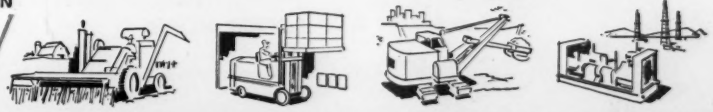


Chrysler Ind. 32 Engine—265 cubic inches displacement

CHRYSLER *Industrial Engines*

INDUSTRIAL ENGINE DIVISION • CHRYSLER CORPORATION

HORSEPOWER WITH A PEDIGREE



AGRICULTURE • INDUSTRY • CONSTRUCTION • OIL FIELDS

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® OF THE WEEK

› SENATOR WALTER F. GEORGE left heat-stricken Washington for his Georgia home last week after one of the most moving episodes of his 33 years in the Senate. Wearied by his exacting duties as chairman of the Foreign Relations Committee, weakened by a recent illness, the 77-year-old dean of the Senate was looking forward to a rest.

Republicans and Democrats joined in making it an emotion-charged farewell. They knew the Georgia Democrat faces a possible primary battle with former Governor Herman Talmadge if he seeks re-election next year; knew also that he could step into a less demanding post as an adviser to Secretary of State John Foster Dulles if he decides to retire.

The Senators praised their colleague's "vision and courage" in working with the Eisenhower Administration toward a bipartisan foreign policy; wished him many more years in the Senate. A leader in proposing that U. S. discuss the issues with world Communism, he was credited with holding the Democrats together in a surprising display of unanimity.

Senator George listened with bowed head to the stream of tributes, murmured: "I hope I shall come back." In Georgia he planned to assess the political situation, answer charges by Mr. Talmadge's supporters that he has paid too much attention to foreign affairs, not enough to Georgia's home problems. Friends say he wants to run again.

› PRINCESS MARGARET ROSE of Britain celebrates a birthday this month—a turning point in her life that may evoke a romantic announcement and some political and religious fireworks.

The Princess reaches 25 on August 21 and, under a British law dating back to 1772, will be free to marry any man of her choice without the consent of the Sovereign. That means she can openly resume her oft-rumored romance with Group Capt. Peter Townsend, a Royal Air Force officer, even though her sister, Queen Elizabeth II, may disapprove.

Captain Townsend is 40, handsome, and a much-decorated hero of World War II. Normally, the British could be expected to overlook the difference in their ages, applaud the story-book love of a princess for a commoner. But—the captain is a divorced father of two children.

The Church of England bars the remarriage of divorced persons. Queen Elizabeth, as "Defender of the Faith," could not sanction such a marriage. Captain Townsend, once on the Buckingham Palace staff, was sent to the British Embassy in Belgium as air attaché.

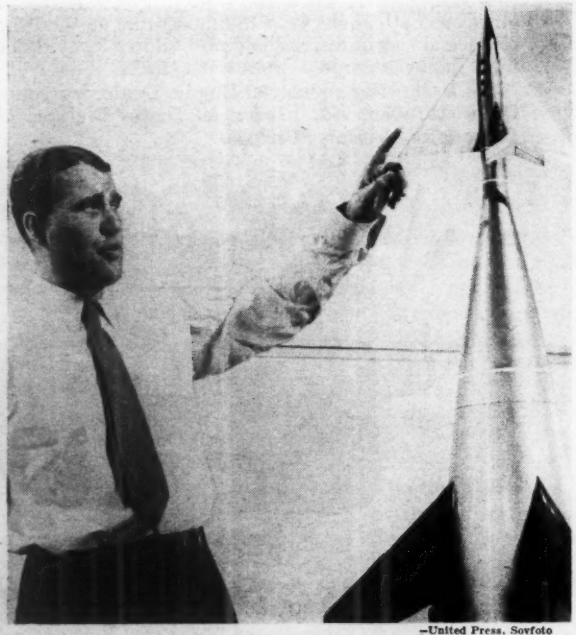
Princess Margaret, a slender, dark-haired beauty, is reported ready to surrender her royal prerogatives for the love of the captain. That means she would give up her right of succession to the throne. She is now third in line, behind the Queen's two children.

› RED CHINA'S SPOKESMAN in diplomatic negotiations with the U. S. at Geneva is a veteran intriguer with close ties to Russia. **Wang Ping-nan** is credited with selling many Westerners the idea, during World War II, that the Chinese Communists were "agrarian reformers," anxious only to build a democratic China unconnected with Moscow.

Wang first came to Western notice at

(Continued on page 14)

AIMING AT THE MOON—FROM EAST AND WEST



—United Press, Sovfoto

VON BRAUN AND ROCKET MODEL

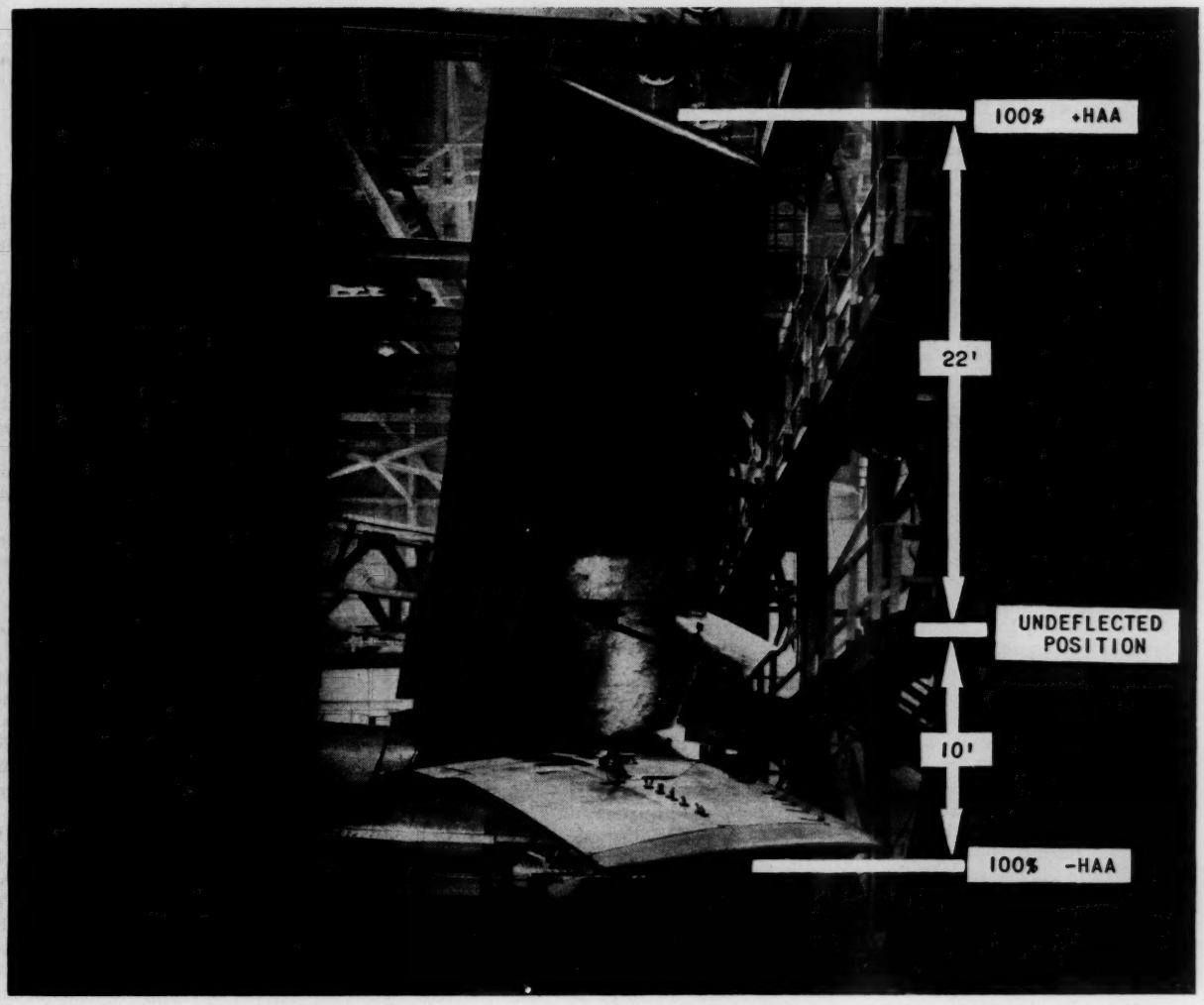
› SPACE SCIENTISTS of the U. S. and Russia headed down the middle stretch of their race to be the first to launch an experimental satellite. Later objectives: a manned space station, maybe trips around the moon. U. S. rocket expert **Wernher von Braun** calls it "man's last great adventure."

Dr. von Braun, who built Nazi Germany's V-2 rockets, later became a U. S. citizen, predicts that by 1985 a manned space ship will be circling the globe in an orbit 1,075 miles above earth. He envisions its being constructed by spacemen sent aloft by rocket, along with necessary materials.

SEDOV

The Russians, meanwhile, are talking of launching satellites of various sizes within two years, perhaps 18 months. There is no clue, however, as to whether they are as far advanced as the U. S.

Leonid Sedov, head of the Soviet Commission on Interplanetary Communication, told a meeting of scientists in Denmark the first Red satellite would be bigger than the basketball-size prototype planned in America. But he said that it, like the one to be launched by U. S. in 1957 or '58, would carry nothing more than instruments, would be destroyed as it fell toward earth.



Torture-testing helps build safety into Boeing airplanes

The B-52 eight-jet global bomber requires half an acre of parking space. Yet tucked in a corner of Boeing's new Flight Test Center is a structural installation large enough, and advanced enough, to accommodate and load test this giant Air Force weapon.

The composite picture above shows the extremes of upward and downward deflection to which the B-52 wing was subjected in load tests. The deflection is 22 feet above and 10 feet below normal unloaded position. The loads applied far exceed those the airplane might encounter under the most severe combat conditions.

Another phase of the test program is devoted to the B-52's pressure section. In these tests the section has been subjected to twice the pressure differential it will have to withstand at high altitude. Boeing's pressure research program has been a continuing one since 1936, when this company began designing the original Stratoliner, the world's first pressurized airliner. This pioneering Boeing aircraft, in 1939, inaugurated today's era of pressurized four-engine commercial transports.

In all, more than 150 twisting, bending and shear tests will be applied to the B-52. The program will have required 14 months, and the investment of 110,000 engineering man-hours, and 430,000 shop man-hours before it is completed.

Like earlier Boeing airplanes, the B-52 is proving in these tests the validity of its structural design, the integrity of its materials and construction. This is the kind of program which, along with the company's advanced research, its vast engineering and production resources, accounts for the remarkable dependability and high performance standards of aircraft designed and built by Boeing.

BOEING

CONTINUED

Chungking, wartime seat of the Chinese Nationalist Government, as an aide to Chou En-lai. Chou, now Red China's Premier, was then Communist "Ambassador" at Chungking, and Wang served as his liaison man with foreigners. In this work Wang was aided by his German-born wife, Anna, who spread stories about the shortcomings of the Nationalist Government of Chiang Kai-shek.

Wang, about 47, was born into a land-owning family, joined the Communist Party 30 years ago. He later went to Germany, studied at Berlin University, and spent some time in Russia.

After the Communists captured China in 1949, Wang set up his own Iron Curtain in Peiping, withdrew from all Western contacts. He became executive secretary of the Chinese-Soviet Friendship Society, spent much of his time with Russian visitors. Last November he was appointed assistant to the Foreign Minister; three months later got his present post as Ambassador to Poland.

JOHN L. LEWIS, labor leader and banker, was keeping the coal industry guessing about his plans for getting a new contract for the United Mine Workers. Mr. Lewis, out of the labor-dispute headlines during the last three years, passed up a chance to serve the 60-day notice on mine operators required before he could terminate the union's contract on its anniversary date, October 1. But he still could serve notice at any time.

The miners' president, at 75, has watched workers in autos and steel win improved wages and other benefits. At the same time, he has seen the coal industry snap back to life after five years in the doldrums. In the nation's soft-coal fields, many miners are back on a five-day week; some on overtime.

But, though pay checks are fatter, fewer men are hacking at coal seams. This decline in the mining work force has led to reports that Mr. Lewis would open negotiations seeking a shorter work week, rather than a pay hike, in the hope of getting more union members back on the mine payrolls.

The Mine Workers' leader, in the meantime, is reported to have become Washington's second-biggest banker. Putting the huge treasuries of his union and its welfare fund to work, he has purchased control of two banks with resources in excess of 235 million dollars.

SYNGMAN RHEE is threatening to take "certain action" unless Communist North Korean forces withdraw from a slice of territory south of the former 38th-parallel boundary of North and South Korea. The 80-year-old President of South Korea fears a reopening of the war by the Reds at any time, says the United Nations and the U. S. have forgotten their pledge to create a unified and independent Korea.

In a rare news conference, President Rhee said he had not fixed a time limit for Communist surrender of the territory in question, which was held by the Reds when the armistice was signed. Nor would he say what "action" he had in mind. But he declared he would not negotiate with the North Koreans.

Ever since the armistice, President Rhee has made it plain that if he were not restrained by the U. S. he would reopen the shooting war against the Reds. For him, there is no compromise with those he regards as foes threatening the entire free world.

The President lives simply, following an early-to-bed, early-to-rise routine; spends his free time walking, playing with his dogs, tending a garden. He says he would like to lay aside the cares of office, but most South Koreans believe he will be a candidate for re-election when his present term expires next year.

SENATOR GEORGE H. BENDER has disclosed what appear to be qualms felt by President Eisenhower on the advisability of running for a second term. The Ohio Republican's report of a White House visit sent shivers down the backs of party leaders; stirred speculation that the President is feeling the strain of office.

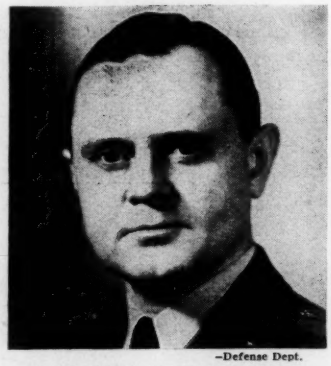
The heart of the matter is age, Senator Bender related. In a chat with members of an Ohio delegation which urged him to seek re-election next year, President Eisenhower is said to have reflected aloud: If he were re-elected, his second inauguration would come at age 66. Only one other President has been inaugurated at a greater age. That was William Henry Harrison, who died at 68 a month after taking office in 1841.

The Chief Executive recalled that no President has ever been in office on his 70th birthday. Mr. Eisenhower would be three months past that age at the end of a second term. He then mentioned the physical erosion of a man working under the stress of world problems.

Senator Bender was not discouraged by the President's words, thinks he will run again. Another member of the Ohio delegation did not get "a very definite impression either way."

The Ohio Senator, who is serving the final two years of the term of the late Robert A. Taft, was asked by the President if he, himself, planned to run again. Replied Mr. Bender: "I'm running now."

OFFSHORE GUARDIANS



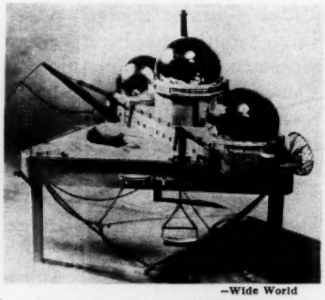
—Defense Dept.

GENERAL WASHBOURNE

A DEFENSE PLANNER expects to see completion soon of this country's first man-made radar island, one of a string of offshore warning bases designed to protect the Eastern Seaboard from a sneak air attack. Directing the operation is Maj. Gen. **Lee R. Washbourne,** Air Force chief of installations.

Radar Island No. 1, an 8-million-dollar project, has been towed to a point 100 miles east of Cape Cod, Mass., on the continental shelf, a submerged plain that rims the Atlantic Coast. It rests on three steel-and-concrete legs driven 48 feet into the ocean bed. Its radar station should be operating by October.

The platform is modeled after the "Texas towers" used in oil-drilling operations in the Gulf of Mexico. It rises 83 feet above mean low water, has a helicopter landing deck, will be manned by 50 to 75 Air Force and Navy personnel. Four others are planned.



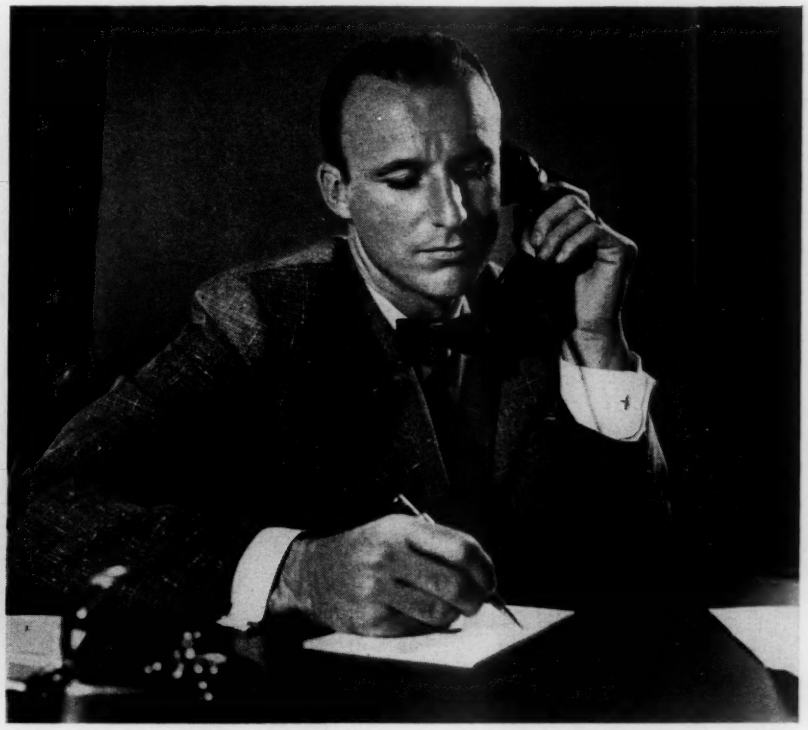
—Wide World

RADAR ON STILTS

(Advertisement)

Don Nielsen

That old black magic paved the way for sixty million cars



"EVER notice how the success of one product will often create a demand for another?

"Back around the turn of the century, for instance, Union Oil couldn't sell much gasoline because there were only 4100 or so cars in the country and no good roads. We did most of our business in kerosene and fuel oils.

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"Fortunately, Union has always had

a large supply of crude oils ideal for making asphalt. So we started producing a simple product you could pour right on the road.

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"Today, we're one of the largest producers of asphalt on the West Coast. We maintain plants and storage facilities in seven cities and make over eighty different grades.

"Today, too, you enjoy thousands of miles of good roads. And asphalt covers 86% of them.

"Gasoline? We're selling more of that now than anything else!"

As Don Nielsen—Mr. Asphalt in our home office—points out, one successful product does help another.

A single carload of asphalt transformed into a highway now creates a demand for at least one thousand gallons of gasoline a year.

Asphalt's large share of the market is due to its own inherent merits. It is far superior to any competitive paving material in ease of application, in load-bearing ability, in long life and in safety. What's more, it costs less per mile to put down and to maintain.

Asphalt is another example of a better product bringing its benefits to more people through America's free competitive economy.

YOUR COMMENTS ARE INVITED. *Write: The President, Union Oil Company, Union Oil Building, Los Angeles 17, California.*

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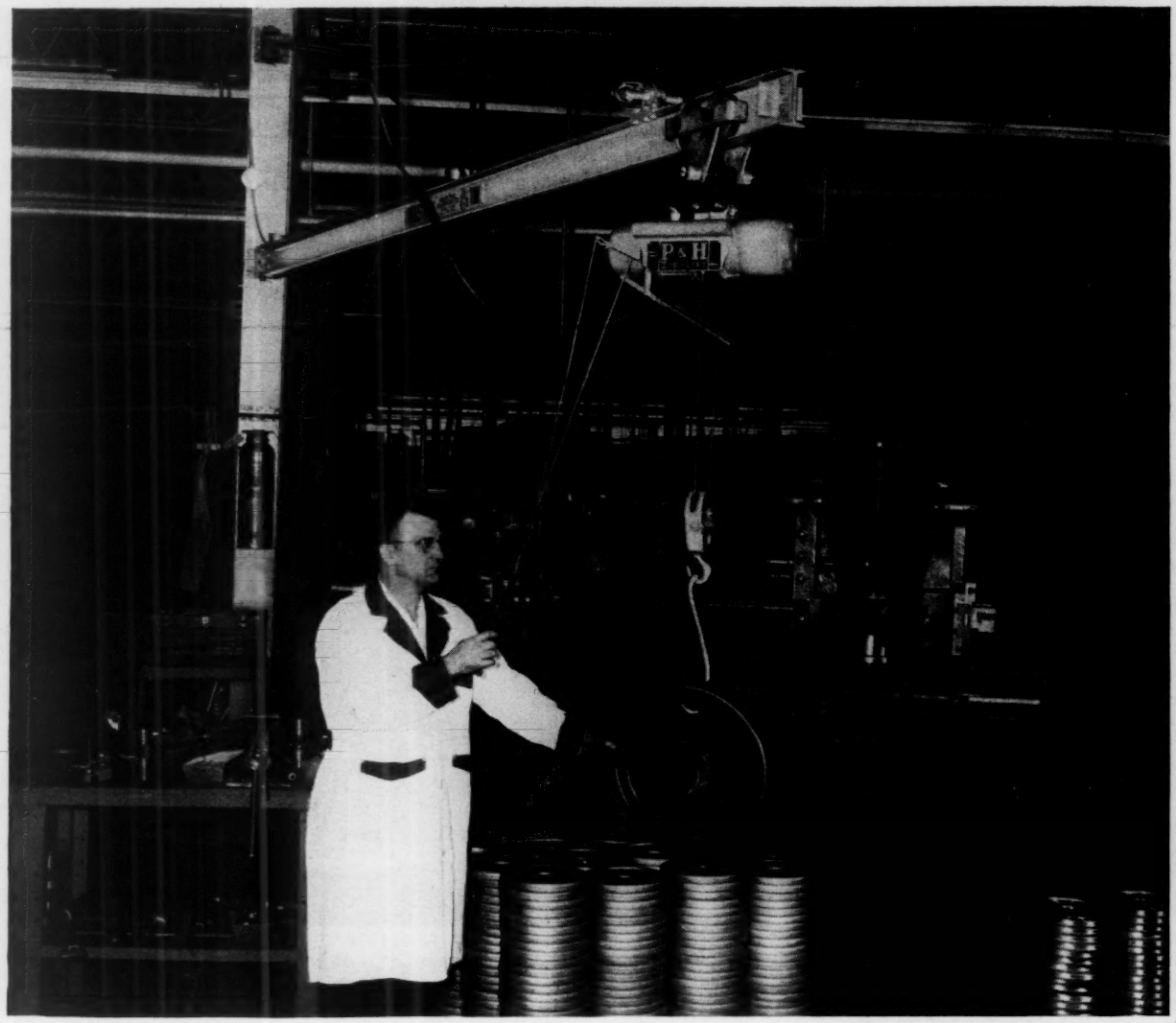
MANUFACTURERS OF ROYAL TRITON, THE AMAZING PURPLE MOTOR OIL



How P&H overhead handling reduces your overhead

We've got figures in our case-history file that prove some users are operating P&H Hoists for less than 10¢ per day! If your materials-handling costs are giving you trouble — then it will pay you to investigate the complete P&H Hoist line.

Take the P&H Zip-Lift Special shown above. It's a rope-controlled, wire rope hoist. It has two brakes, a grooved drum, and a limit switch. It's packed full of features and values that you're accustomed to getting only in higher priced equipment.

Yet P&H offers you the Zip-Lift Special, with ten feet of lift, in the 250-lb. capacity model — for only $145. Other models — 500 lb., 1000 lb., and 2000 lb. capacities, run slightly higher. Lifts of 14′, 18′, and 20′ are also available.

Look to the complete P&H line for the hoist that best suits your needs. Whether it's a Hand Chain Hoist, a Zip-Lift or a Hevi-Lift — they're available from 250 lbs. to 15-ton capacities. That's because P&H has the most complete line in the business—with over three million variations of hoists to choose from. P&H Hoist Division, Harnischfeger Corporation, 4402 W. National Ave., Milwaukee 46, Wisconsin.

HARNISCHFEGER

the P&H *Line*

VOLUME XXXIX—No. 7 U.S. News & World Report WASHINGTON, D. C.

WHERE POLIO VACCINE HELPS

Less Paralysis Shows Up to Date Among Vaccinated

Something is happening to polio this summer—

Number of cases, across the U.S., is well below the level of recent years.

Pattern of the disease is changing, too. Proportion of crippling types of attack is down among youngsters now vaccinated.

Severe epidemics are occurring in a few spots, as usual, but even here the proportion of paralytic cases is lower among the vaccinated.

Are polio shots, now administered to 6.5 million children, causing a basic change? No one knows, but clues so far look good.

With polio reaching the height of its season, in a year when millions of children for the first time have the protection of at least one shot of Salk vaccine, these results are showing:

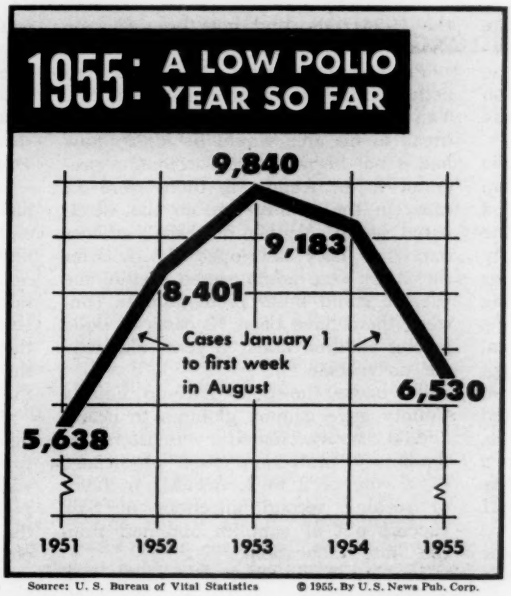
• Polio cases for the nation as a whole are substantially fewer than in any of the three years just previous. Health officials give at least part of the credit for this to the vaccine.

• Flare-ups of polio on a severe scale have occurred in a few areas. Massachusetts—especially Boston—has been hit hard. The rate is up for New York City, some spots in Wisconsin, Fairfax County in Virginia, among others.

• In places where polio outbreaks have been especially heavy, not a single case had occurred up to August 2 among children who got the full course of Salk shots in last year's field trials. Among children who this year have received a single shot each, figures show that fewer cases of paralytic polio are occurring than might have been expected.

• The Salk vaccine, however, is not a guarantee against polio. Claimed effectiveness is not much more than 90 per cent even after the complete series of three shots is given. So far in 1955, only a relatively small number of children have received more than one shot.

• Comparing the number of cases of polio among vaccinated children with the number among children of similar age who have not received shots shows an encouraging downward trend. Exactly how much of this is due to the single shot most vaccinated children have received is not yet clear. It will be 1956 before the majority of children in susceptible ages get all three Salk shots—and perhaps even 1957 before the vaccine's effectiveness can be measured fully.



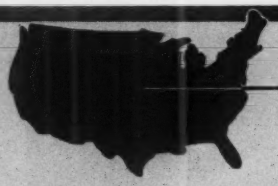
There is no doubt that—except in a few areas—1955 is turning out to be a rather light polio year. As charts on pages **17 and 18** show, total cases in the U. S. from January 1 up to the first week in August are well below totals for the same period in 1952, 1953 and 1954. In only a handful of States is the rate running higher than last year.

Some health authorities credit the Salk vaccine with an important part in this picture. Others say no conclusions can yet be drawn, that additional factors may also be responsible.

Where polio has hit. It is in the areas where polio this year has flared up, though, that current experience takes on most interest.

In Massachusetts, the disease has been in near-epidemic proportions—eight times as high as last year. Around 300 cases had been counted in Boston alone. Up to August 5, one case had occurred among children who received all three vaccine injections during the test program last year.

Massachusetts' first and second-graders this spring got one shot before schools closed. Nineteen of



POLIO PICTURE ACROSS THE NATION

Cases January 1 to first week in August

	1954	1955
Alabama	179	78
Arizona	98	39
Arkansas	165	80
California	1,525	764
Colorado	82	78
Connecticut	78	70
Delaware	9	27
Dist. of Col.	12	13
Florida	619	282
Georgia	245	97
Idaho	25	130
Illinois	268	223
Indiana	102	87
Iowa	276	138
Kansas	186	75
Kentucky	165	112
Louisiana	264	180
Maine	9	16
Maryland	21	56
Massachusetts	73	445
Michigan	390	244
Minnesota	129	103
Mississippi	242	105
Missouri	121	64
Montana	50	23
Nebraska	154	82
Nevada	38	51
New Hampshire	12	18
New Jersey	100	92
New Mexico	43	47
New York	323	416
North Carolina	172	122
North Dakota	28	22
Ohio	348	228
Oklahoma	244	108
Oregon	87	102
Pennsylvania	138	164
Rhode Island	7	21
South Carolina	132	90
South Dakota	32	29
Tennessee	145	74
Texas	1,396	854
Utah	44	34
Vermont	6	21
Virginia	110	100
Washington	93	88
West Virginia	60	40
Wisconsin	75	171
Wyoming	63	17
Alaska	101	12
Hawaii	190	32
Puerto Rico	16	Not Available

Source: U. S. Bureau of Vital Statistics

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this group have since contracted polio. But 11 of the cases have been nonparalytic. Thus the percentage of these children crippled by the disease has been somewhat smaller than might normally have been expected.

In Wisconsin, the number of polio cases up to August 2 was more than double a year ago. Outagamie County, a rural area in the northeastern part of the State, had the biggest outbreak. Majority of the cases there, however—as well as in the rest of the State—was occurring among nonvaccinated children.

In the school inoculation program, some 93,000 Wisconsin youngsters got Salk vaccine—about half of them two injections. Eight of these vaccinated children have come down with polio. But among nonvaccinated children in a similarly susceptible age group—those 6 and 7 years old—there have been 21 victims.

Unlike Massachusetts, not one of the Wisconsin volunteers who took part in the 1954 tests, and got three vaccine shots, has contracted polio this year.

Praise for program. Dr. Harold Kennedy, health officer of Fairfax County, Va., says he thinks the toll from the outbreak in his area would be higher now had it not been for the vaccination program. As of August 2, there were 22 cases in the county—two in the vaccinated group. Neither of these two was paralytic. They developed shortly after the shots were administered—before the vaccine could build protection. In contrast, there have been 13 cases of polio among children under 6 years old, who got no vaccine.

To battle the polio flare-up Fairfax County gave gamma globulin to nearly 25,000 nonvaccinated youngsters as temporary protection. And physicians, by a vote of 2 to 1, decided in favor of rushing second injections of Salk vaccine out of supplies obtained from the State's allocation.

In New York City, a mounting toll was tabbed by authorities as "not yet of epidemic proportions." There were 148 cases up to August 2, compared with 65 the year before. The city was going ahead with plans to give second shots of vaccine to 171,500 first and second-graders.

Eight cases—including one death—have occurred so far among vaccinated children in New York. Health officers noted that, taking both paralytic and nonparalytic types together, the polio rate among children who did not receive shots was three times that among those who did. For paralytic cases alone, the rates of the two groups were about the same.

Few cases in Mississippi. A fairly light year for polio in Mississippi still turns up significant facts about the Salk vaccine. There have been no cases of polio this year among those inoculated in the 1954 field trials. Out of 109,000 children given one or more shots this spring, there have been 11 cases. Ten

✔ SPOT CHECK ON POLIO

✔ Boston

SERIOUS OUTBREAK. Polio up 700% over 1954. New cases breaking out faster than in record epidemic years 1910 and 1916.

ONE CASE in State among children who got three Salk shots in 1954 field tests. 19 cases among children who got single shot this year. Of these 19, only 8 are paralytic cases, fewer than might have been expected.

✔ New York City

POLIO SPREADING. Cases far more numerous than a year ago.

OUTBREAK more widespread in nonvaccinated children.

POLIO RATE, for paralytic and nonparalytic types combined, runs only one third as high among vaccinated children as among nonvaccinated children. In paralytic polio alone, incidence is about the same in the two groups.

✔ Outagamie County, Wis.

WISCONSIN OUTBREAK centers in this northeastern county. Up to August 2, Outagamie County had 69 cases. No polio so far among children who received three shots in 1954 tests.

STATE-WIDE, 8 cases among 8 and 9-year-olds who got vaccine this year. 21 cases among nonvaccinated children 6 and 7 years old, who are similarly susceptible to polio.

✔ Mississippi

LIGHT YEAR FOR POLIO. Cases, so far, running much below 1954.

AMONG VACCINATED children, 11 cases to August 2, one of them mildly paralytic.

Official report shows, at end of June, case rate of 3.9 per 100,000 among vaccinated children, with 1 out of 10 cases paralytic. Among nonvaccinated children, case rate of 8.8 per 100,000, with 5 out of 10 paralytic.

✔ Fairfax County, Va.

HEAVY OUTBREAK OF POLIO. 22 cases reported to August 2. Only 2 of these among vaccinated children. Both developed shortly after shots were given, and are nonparalytic. 13 cases among children under 6, an age group that did not get vaccine.

Gamma globulin being used, and health officials asking and getting extra Salk vaccine.

✔ Canada

LOW POLIO YEAR. 202 cases so far in 1955, 50 per cent below five-year average.

880,000 children got 2 Salk shots. Up to August 2, only 1 of these had come down with polio, a paralytic case.

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were nonparalytic, the other only a mild case of paralysis.

A report by Mississippi health officers at the end of June showed a polio rate, per 100,000 population, of 3.9 in vaccinated children and 8.8 in nonvaccinated. For the first group, 1 out of 10 cases was paralytic; for the second, one out of two.

Canada also is having a light polio year. The 202 cases as of August 2 were 50 per cent fewer than during the same period last year. Only one case was that of a child injected with Salk vaccine. The Canadian program has seen 880,000 children given two shots apiece.

Critical period ahead. In the U. S., the 6.5 million children who have received polio shots are in an age group that usually accounts for 10 per cent of the polio cases in a given year. At this rate, it might be expected that—out of the 6,530 cases reported up to August 2—there would be 653 cases in this age group. Actually, there have been only 247 cases among vaccinated children.

U. S. Public Health Service spokesmen point out, though, that the year is not over. They say more cases are sure to occur among these 6 to 9-year-olds, since the vaccine does not assure complete protection.

Experience in the past has shown, they add, that a period of heavy incidence of polio is followed by a year or so with light incidence. That is because more people become exposed and develop immunity when polio is widely prevalent, leaving fewer possible victims until a new crop of babies grows up. The years 1952-54 saw lots of polio; 1955 therefore can be expected, along this line of thinking, to be a light year.

Also, PHS authorities caution against drawing overbroad conclusions on the basis of isolated statistics from a few areas. The heaviest part of the polio season still is ahead. Unequivocal answers cannot come until after it is over—and until after a far larger part of the nation's children have been given the full course of shots.

Still unanswered, too, is the question of how long the vaccine's protection lasts. Best present indications: Several years—hopefully, as many as five.

However good the vaccine now may be, improvements are certain to come. Dr. Joseph Bell, chief epidemiologist at the Government's National Institutes of Health, thinks that in its present form it is about as effective as the vaccine for whooping cough, but not as good as smallpox vaccine or diphtheria toxoid.

Another polio development. With the need for vaccine by the National Foundation for Infantile Paralysis in its free-inoculation program temporarily filled, shots become available through commercial channels. States are to get allocations on the basis of the number of children in priority age groups. Voluntary co-operation by doctors in most States is counted on to limit shots to children of ages 5 through 9.

HOW TO ENLIST FOR SIX MONTHS

THE WAY NOW is opened for 250,000 youths each year to avoid a draft into two years of military service. These youths, ages 17 to 18½, can fulfill their obligations with six months of active service, then 7½ years of weekly drill.

The question now is raised: Exactly what should a youth do who wants to take advantage of this shorter service—usually just prior to entering college? The answer in some detail is given for you in the chart on this page.

It is going to be a few weeks, however, before the machinery for volunteering is in working order. It will be necessary for each unit of Reserve forces to be assigned quotas of men who can be accepted. The expectation is that machinery will be operating by early September.

After that, enlistments will be on a first-come, first-served basis.

At the outset, many youths will find a choice of service. If the Reserve training proves popular, this choice will narrow as volunteers fill quotas.

The openings offered. The Army Reserve will have the largest number of openings. Officials figure on taking in about 100,000 six-month trainees by June 30, 1956. Army Reserve includes technical and supply units as well as infantry companies. Usually only one Reserve unit is found in a given locality, but around large cities there may be several types.

The National Guard, a part of the nation's Ready Reserve, also will enlist youths for the six-months training. The Army Guard seeks about 67,000 recruits by next June 30; the Air Guard needs 9,000. But enlistment is on a strictly local basis. A few units already are filled up.

The Marines will offer short-term training to about 1,000 youths a month, under preliminary plans.

The Coast Guard has a plan for six-month training, too. There will be billets for several hundred youths a month, coming directly from civilian life, in the Coast Guard Reserve.

Air Force and Navy do not now plan to take youths for six-months training.

That's a glance at the opportunities for a shortened form of service, as they will open up in weeks ahead for youths approaching draft age. The youth who enters a Reserve plan will be "on call" for eight years, compared with the six-year obligation for a draftee. But the Reservist will serve only six months on active duty, instead of two years.

For important effects of the new Reserve Act on current and future veterans, see page 57.

THESE ARE THE STEPS FOR ENLISTING

Youths 17 to 18½ years of age now can enter Reserves, take 6 months' active duty as an alternative to 2 years' draft. Program starts when orders come from Washington.

What a youth must do to join:

Step 1 — Get parents' written consent to enlist. No consent needed after 18th birthday.

Step 2 — Apply to nearest unit of National Guard, or Army, Marine or Coast Guard Reserve. Post office has addresses. Army will offer most vacancies.

Step 3 — Take physical exam, usually by a local physician. Standards same as for draft.

Step 4 — Be sworn in by unit commander.

Step 5 — Draw uniform, wait for orders to training camp. High-school graduates may go soon, a few weeks after signing up. A boy still in high school will not be sent to camp until he graduates. He can sign up now.

Step 6 — Report for training, probably at same Army camp local draftees attend.

Step 7 — Undergo 4 to 6 months of recruit training. Visitors, but no leave, allowed. Pay of $50 a month. Free insurance, other benefits, of regular soldier.

Step 8 — Return home, spend 7½ years in Reserve or Guard unit. Drill 48 times a year, attend annual 2-week maneuvers; or, in place of drills, a 30-day training period each summer.

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NEW LAWS THAT MAKE LIFE DIFFERENT

Congress Changed Pay, Draft, Public Works, Trade Policies

Millions, one way or another, will feel the effects of what Congress did and didn't do in the 1955 session.

Big decisions, many of them, were put off until 1956. These include such issues as tax cuts, highways, old-age pensions.

Still, some large groups—draft-age youths, veterans, many workers—have a direct stake in laws Congress did enact in 1955.

For big groups of people all over the country, there will be changes in day-to-day living as a result of laws voted by Congress in the session just ended.

Other millions will be affected directly by measures that remain on the agenda for almost certain enactment in 1956.

Action by Congress in the closing days of the recent session will open the way for 250,000 youths each year to volunteer for six months of military training, instead of two years required by the draft.

The draft itself is extended to make certain that the armed forces get enough men if their needs are not met by volunteers.

At least 250,000 workers covered by the Wage-Hour Act will get direct pay raises as a result of a new law boosting the minimum wage from 75 cents to $1 an hour. Indirectly, this change in law may bring raises for many others.

Antipolio funds. Also voted was a fund of 30 million dollars to pay for Salk polio vaccine for use in inoculating youngsters, up to age 20, and pregnant women. Distribution of the vaccine was left to individual States. Congress avoided steps that would involve the Federal Government in administering local health programs.

For itself and for other Government employes, Congress voted pay raises adding up to 1.3 billion dollars a year. These include increases for the armed forces, for federal judges and other law officers, for members of the House and Senate, for Civil Service employes. The raises for Congressmen brought their pay from $15,000 to $22,500 a year. Pensions for retired federal workers and their survivors also were increased. But Congress balked at granting new pay raises for key officials of the executive department.

Many housing programs were extended and billions of dollars were made available to carry them out.

Low-cost housing on a subsidized basis will continue to be built for the benefit of people with small incomes. There are 45,000 of these units authorized for construction next year under action taken by Congress.

Enough new money was provided by Congress so that the Government can go on spending at a rate of more than 60 billions a year. The armed forces are to continue their outlay of money at about the present rate. Aid for foreign countries will be continued about as now. The billions voted for defense-supporting activities, such as stockpiling, foreign military aid and atomic energy, will bring the total spending for defense to more than 40 billions, or about what it was in the fiscal year that ended June 30.

Money for public works in the year ahead will stay at about the same level as during the year past. Public works spending is to total 4.2 billions, which the military services and other branches of Government together will spend for everything from airports to reclamation. There is a substantial cut, however, in water-resource development and flood control, with offsetting increases for a variety of other public works.

The Congress that completed action on these and many other things was under Democratic control. This Congress went along with the Republican President on a number of proposals. Action was blocked on a good many other measures—some proposed by the White House, some by the Democrats in Congress.

Taxes, for the time being, are not to be changed. The tax of 52 per cent on corporation income, scheduled to drop to 47 per cent last April 1, was extended. Excises go on at the old rates. A Democratic plan to cut individual income taxes by a flat $20, primarily for the benefit of small taxpayers, was ditched in the Senate.

Plans for '56. The whole question of tax relief is to be dealt with in 1956. Tax cuts are figured as a good approach to voters in an election year.

No broadening of the Social Security system was enacted in the 1955 session.

—Crawford in the Newark Evening News

"IT'S HOT IN WASHINGTON, TOO"
In the background: the 1956 elections

Changes approved by the House, but not the Senate, would have given more benefits to a larger number of people. Here, again, the thought is that 1956 will be the time to give these things to voters.

A cut from 65 to 62 in the age at which wives of retired men may draw pensions is to get no action until 1956. Proposals to fix 62 as a retirement age for working women and to provide retirement benefits for workers age 50 or over who become totally and permanently disabled come up at the same time. Similarly, a plan to make lawyers, dentists and certain other professional people, except physicians, eligible for retirement pensions also goes over to next year for action.

In spite of White House pressures, Congress walked around an omnibus health measure and left it for future ac-

tion. It would expand private health insurance through Government reinsurance of such plans and would develop other health programs.

Similarly, Congress declined to act at this time on President Eisenhower's plan to authorize 1.6 billions of federal aid to the States over a four-year period for building schools. The plan was stymied by opposition from several sources, some fearing the hand of the Federal Government in State school systems, some demanding that no federal money be used for schools that would not admit Negro pupils, and some objecting to the kind of financing proposed.

Road-program dispute. White House pressures also failed to drive through Congress the President's big highway-construction program. It was designed to put some 100 billions of federal, State and local money into a network of traffic arteries over a 10-year period. Disputes over whether the money was to be raised by special bond issues or by increased taxes on fuel and transportation equipment helped to block it. There is a hint, too, of politics in the background.

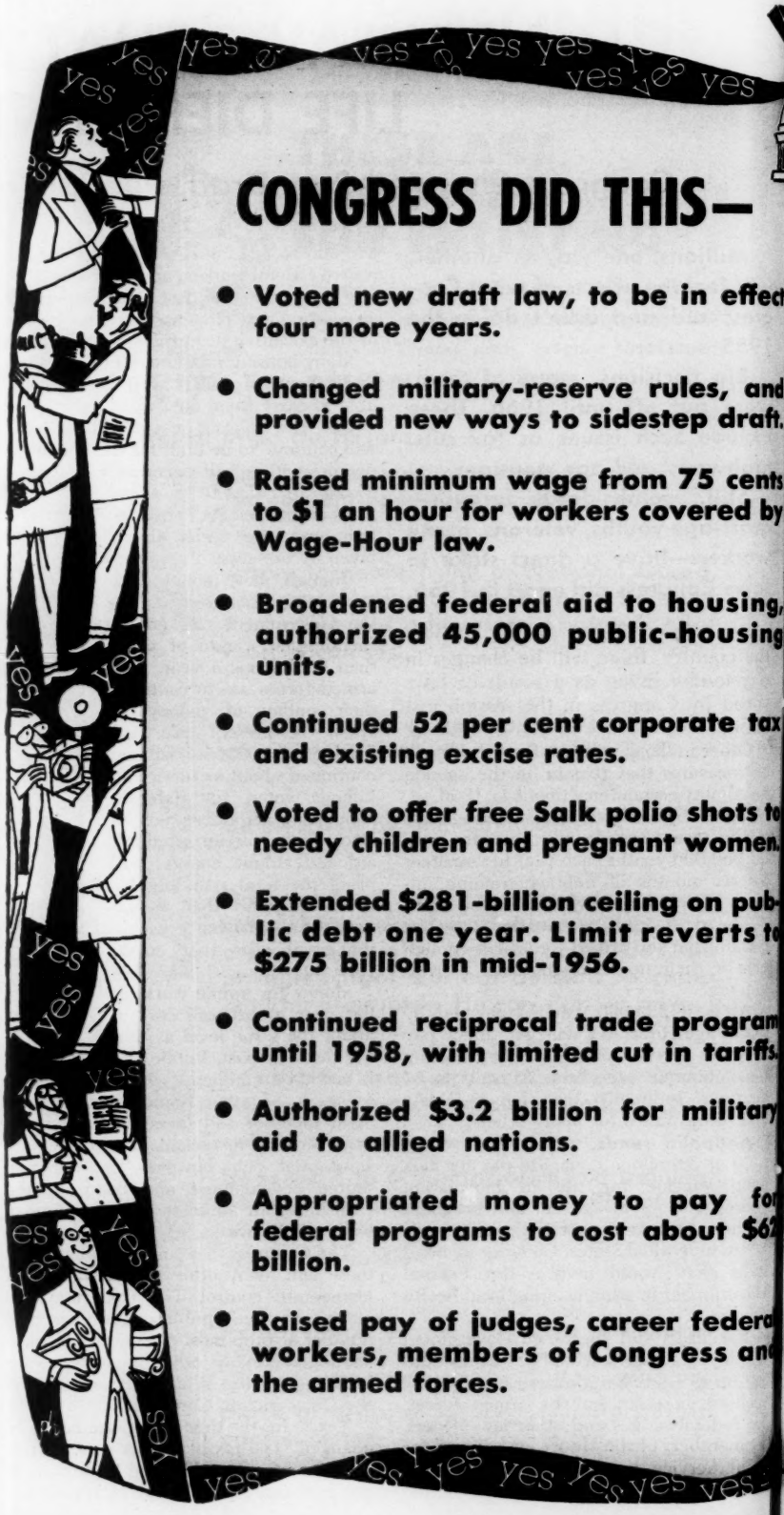
Dozens of small items of legislation went through which, when added together, made a large bundle.

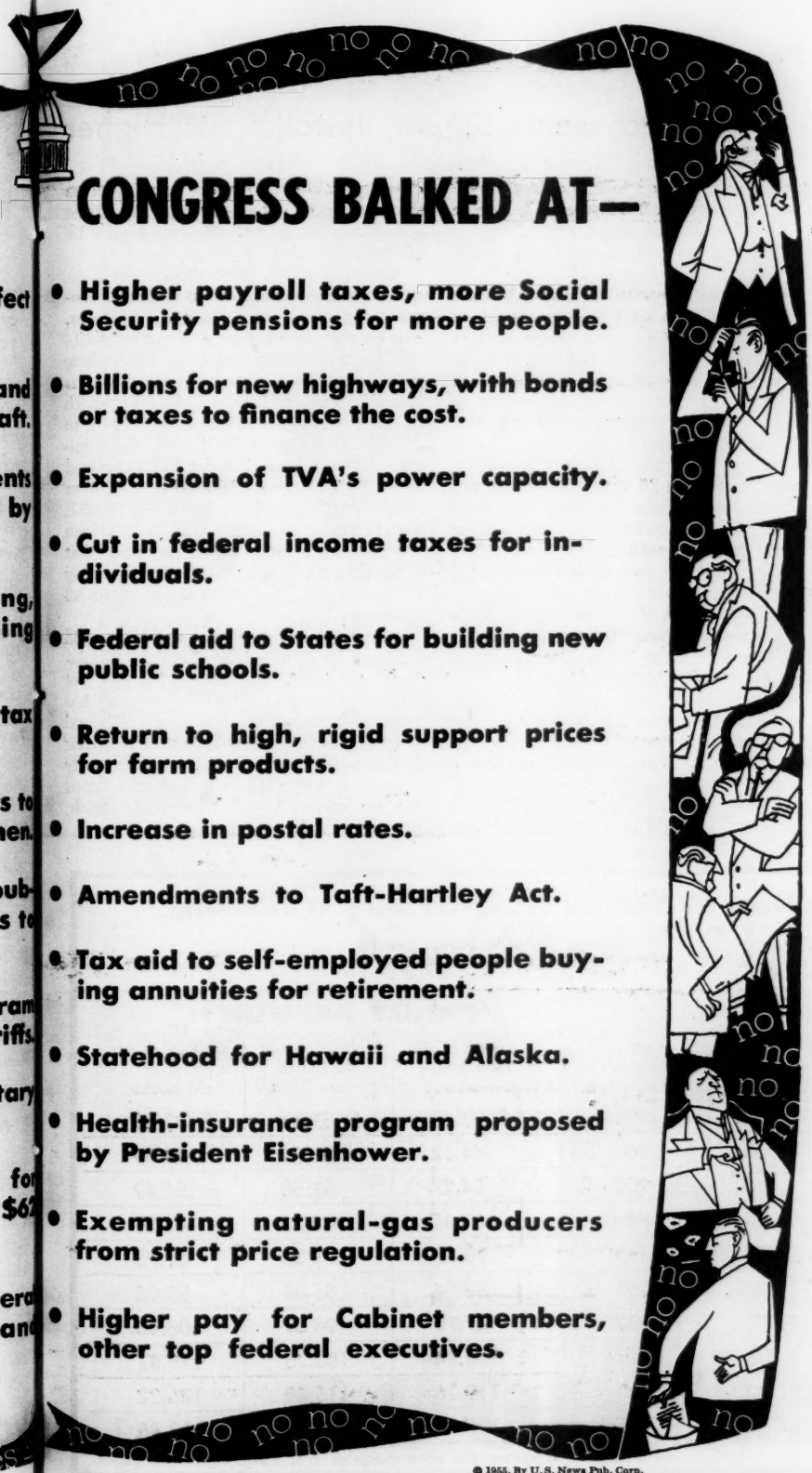
A good many things were given to the armed forces to make peacetime service more attractive. In addition to pay raises, servicemen were given an extension of retirement income tax credits and Social Security wage credits for military service. New housing is to be built for military families at bases at home and abroad. New armories and training centers are to be built for the National Guard and Ready Reserve units. Members of the armed services abroad were permitted to send gifts home duty-free.

In the field of atomic energy, Congress was busy. Four new atomic submarines were authorized. Another firm was added to the list of contractors working on nuclear propulsion for aircraft. But the proposal of the President that an atom-powered merchant ship be built and sent around the world as a showcase for his "atoms for peace" program was turned down.

Farmers got odds and ends of help. Emergency loans in disaster areas were extended for two more years and the interest rates were cut from 5 to 3 per cent. Other loan helps were given them. Acreage allotments for durum wheat and rice were boosted. A restudy of tobacco-marketing quotas was ordered.

As in a great many other things, however, the big push for farmers was put over until next session. A showdown is due then between the Administration and the Democrats over the type of price supports to be given farm products. The Administration is committed to a sliding


yes
CONGRESS DID THIS—
• Voted new draft law, to be in effect four more years.
• Changed military-reserve rules, and provided new ways to sidestep draft.
• Raised minimum wage from 75 cents to $1 an hour for workers covered by Wage-Hour law.
• Broadened federal aid to housing, authorized 45,000 public-housing units.
• Continued 52 per cent corporate tax and existing excise rates.
• Voted to offer free Salk polio shots to needy children and pregnant women.
• Extended $281-billion ceiling on public debt one year. Limit reverts to $275 billion in mid-1956.
• Continued reciprocal trade program until 1958, with limited cut in tariffs.
• Authorized $3.2 billion for military aid to allied nations.
• Appropriated money to pay for federal programs to cost about $62 billion.
• Raised pay of judges, career federal workers, members of Congress and the armed forces.


CONGRESS BALKED AT—
• Higher payroll taxes, more Social Security pensions for more people.
• Billions for new highways, with bonds or taxes to finance the cost.
• Expansion of TVA's power capacity.
• Cut in federal income taxes for individuals.
• Federal aid to States for building new public schools.
• Return to high, rigid support prices for farm products.
• Increase in postal rates.
• Amendments to Taft-Hartley Act.
• Tax aid to self-employed people buying annuities for retirement.
• Statehood for Hawaii and Alaska.
• Health-insurance program proposed by President Eisenhower.
• Exempting natural-gas producers from strict price regulation.
• Higher pay for Cabinet members, other top federal executives.

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scale of price supports such as now is in effect. Many congressmen favor high, rigid price supports such as were in effect in the war years.

Aid from Democrats. In some cases, the President got more support for his proposals from Democrats in Congress than from Republicans. This was true in the case of subsidized housing and in the case of extending the President's power to cut tariffs. The latter was a Democratic plan to begin with.

On domestic legislation, Democratic support for Mr. Eisenhower's program was cut to fit party needs of Democrats in future political campaigns. Time and again, as in the housing measure, presidential proposals emerged from Congress with a Democratic twist that the President had to accept or go without legislation on the subject. All through the session, the President and Congress eyed each other suspiciously and Congressmen searched for issues to use during the 1956 election.

In foreign affairs, however, there were times when such Democrats as Senator Walter F. George, of Georgia, carried the ball for the Republican President.

For most of his measures of foreign policy, Mr. Eisenhower got quick approval. A resolution authorizing him to help defend Formosa with U. S. troops, if necessary, was approved—along with a mutual-aid pact between U. S. and Nationalist China.

A batch of treaties was approved. One restored independence to Austria. One approved West Germany as a sovereign state and a member of the North Atlantic Treaty Organization. Another wrote terms of friendship, commerce and navigation for the United States and West Germany. Still another sketched defense plans for Southeast Asia. There was a treaty of co-operation with Panama, and there were tax treaties with four nations.

In spite of the fact that Democrats rallied back of the President's foreign-trade program to give him power to cut tariffs, Southern Democrats showed less enthusiasm for such a program than they once did. A new growth of industries in the South is having its effect upon their attitude.

The Senate Finance Committee added 29 amendments to the Reciprocal Trade Act aimed at making it less objectionable to some domestic industries. Senator George sponsored two of the limiting amendments. They had been urged by the textile and chemical industries. The President accepted the limitations.

All along the line, big issues that may involve votes were sorted out and put over to next year. It is in the election of 1956 that the legislators want to be remembered by the voters.

It's Harder to Buy a House

Down Payments Bigger, Installments Higher

If you're in the market for a house, you probably will find it now takes more cash down, bigger monthly payments. New rules have just been spelled out by the Government.

Deals with no down payment are out. So are 30-year mortgages.

Home loans are getting tighter, harder to come by.

This is a practical look at what the latest changes mean.

Signs proclaiming "No down payment for vets" are disappearing now from new housing developments all over the country. The individual shopping for a new home is to find financing slightly harder to get, not quite so much like rent.

New home-financing rules, just announced by the Federal Housing Administration and Veterans' Administration, increase both the minimum down payment and the minimum monthly payments for mortgage loans made through these two agencies. The result is shown in the table on this page.

The big changes, in practical terms, are to be these:

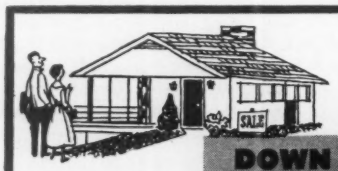
- Basic cash needed to finance a house with either FHA or VA is increased, in most cases, by 2 per cent of the house's cost. That's $500 above the former minimum in the case of a $25,000 house. It ends the practice of selling homes to veterans with no down payment required.
- Longest period over which a new house can be financed is brought down from 30 years to 25 years. The old maximum, in effect since 1953, has been used to offer very low monthly payments, often comparing well with rent.

These are the two basic changes. Interest rates remain unchanged. Mortgage loans other than those backed by FHA or VA are not affected directly, although the terms on these "conventional" loans, too, are tending to tighten up.

Nor is there any assurance that a mortgage loan can be obtained for the minimum payments indicated in the table. The individual still must find a lender. An appraisal of the house must be made—and may not coincide with the stated price. The seller may ask any down payment above the minimum, so that more cash may be required than the stated minimum. And the terms may be on the basis of 20 or 15 years.

Just how much more cash now is required to finance a house if the most economical terms are obtained, however, can be seen in the case of a typical $20,000 home. If new, under the FHA plan, it will require a down payment that is raised from $3,200 to $3,600, with monthly payments raised from $92.01 to $97.79. If for an older house, the minimum down payment under FHA is raised from $3,700 to $4,100, the minimum monthly payment from $89.27 to $94.81. For veterans, financing with a VA loan will require a basic down payment that is up from nothing to $400 with monthly payments up from $101.40 to $108.98 minimum.

Many houses on today's market still will not be affected by the new regulations, however. The new rules will not apply to homes on which VA already has received requests for appraisals or issued "certificates of reasonable value" prior to this week. Neither are loans previously approved by FHA affected—nor loans for replacement, reconstruction, repair, alteration or improvement.



What It Takes Now to Buy a House

(On mortgages backed by Federal Housing Administration or Veterans' Administration)

MARKET VALUE OF HOUSE	DOWN PAYMENT			MONTHLY PAYMENT*		
	UNDER FHA: new house	UNDER FHA: old house	UNDER VA: new or old house	UNDER FHA: new house	UNDER FHA: old house	UNDER VA: new or old house
$ 6,000	$ 450	$ 750	$ 120	$ 33.10	$ 31.31	$ 32.69
8,000	600	1,000	160	44.12	41.74	43.59
10,000	900	1,350	200	54.27	51.58	54.49
12,000	1,500	1,900	240	62.61	60.23	65.39
15,000	2,300	2,700	300	75.73	73.35	81.73
18,000	3,100	3,600	360	88.84	85.86	98.08
20,000	3,600	4,100	400	97.79	94.81	108.98
22,000	4,200	4,600	440	106.14	103.75	119.87
25,000	5,000	5,400	500	119.26	116.88	136.22
30,000	10,000	10,000	600	119.26	119.26	163.46

*Principal and interest, plus extra charge of ½% a year on FHA mortgages.

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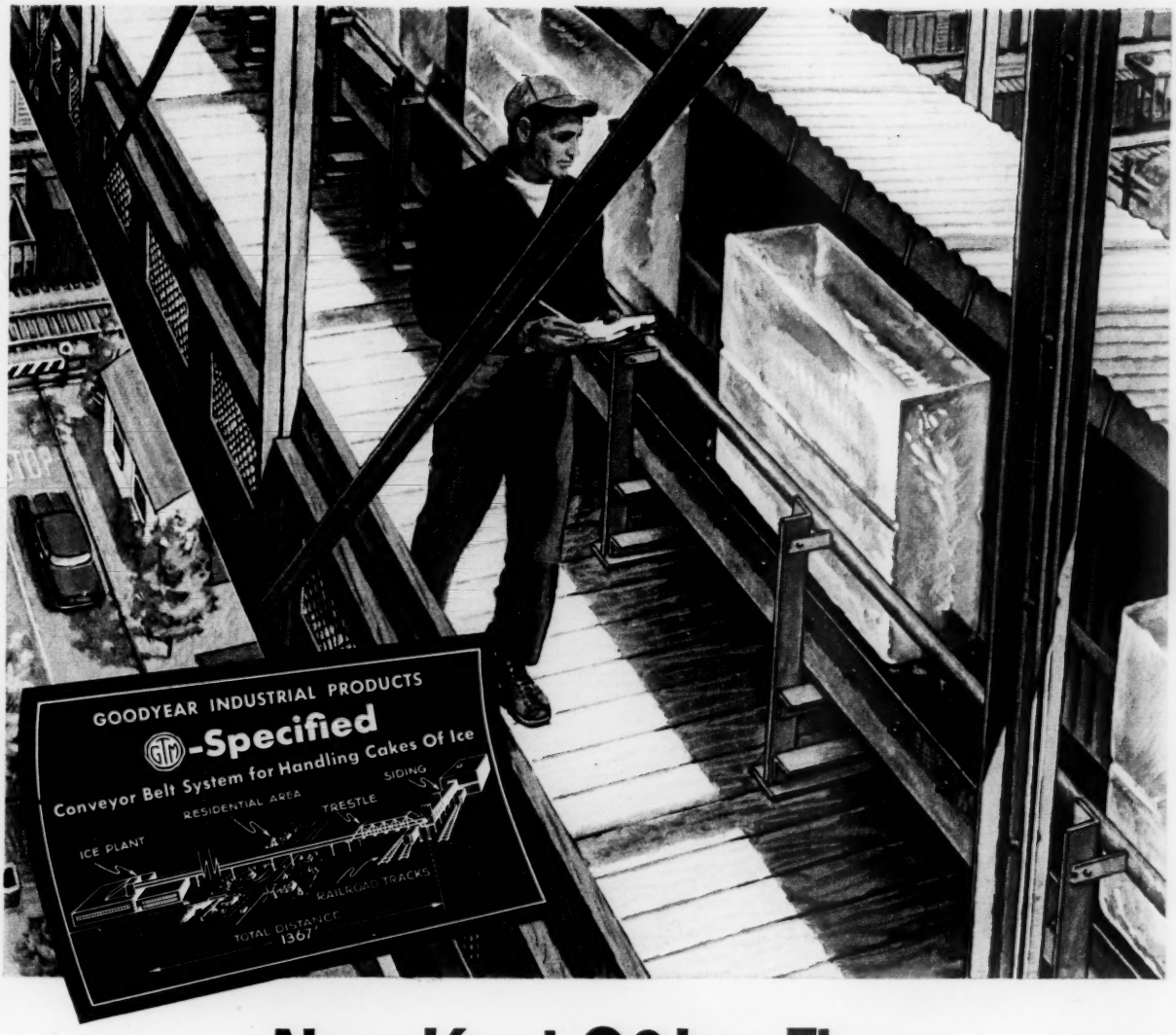

New Kind Of Ice Flow

SLIPPERY materials-handling problem for an Idaho ice plant was hauling 300-pound cakes of ice through a residential section and across railroad tracks to "reefer" cars one-quarter mile away. Ordinary handling methods proved too slow, cost too much, melted away profits.

Slick solution came from the G.T.M.—Goodyear Technical Man. He recommended a belt conveyor two stories high, traveling at 181 feet per minute above all obstacles. Installed, it keeps a sure grip on the slippery cakes—is unaffected by the cold and water—keeps ice flowing steadily with minimum handling.

This G.T.M.-recommended belt is one more proof that rubber conveyors can haul virtually any bulk material anywhere—at lower cost. For expert help on your materials-handling problem contact the G.T.M. through your Goodyear Distributor or Goodyear, Industrial Products Division, Akron 16, Ohio.

YOUR GOODYEAR DISTRIBUTOR *can quickly supply you with Hose, Flat Belts, V-Belts, Packing or Rolls. Look for him in the yellow pages of your Telephone Directory under "Rubber Products" or "Rubber Goods."*

GOODYEAR

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More Style, More Power, And a Built-in Future!

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When you buy a Pontiac you make a solid investment in the future.

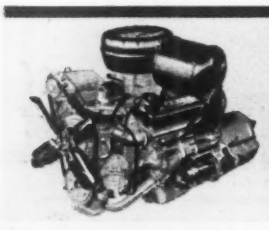
First of all, Pontiac's years-ahead beauty holds the promise of lasting fashion. And the smart distinction of Pontiac's Twin-Streak styling and Vogue Two-Toning marks you as one of the first to spot a trend.

You make a solid investment, too, in the world's most modern power. The smooth, nimble way it glides you through traffic and the instant, surging, passing power it provides on the highway are constant reminders that Pontiac's mighty Strato-Streak V-8 is all that any engine can be—in the great Pontiac tradition!

Yes, everything about Pontiac's beauty and performance says that here's a car that, in a single bold step forward, brings you all that's new and good.

When you consider that you can buy a big, beautiful Pontiac at a price well within any new-car budget, don't you agree that your Pontiac dealer's is the soundest place to spend your automobile dollar?

PONTIAC MOTOR DIVISION OF GENERAL MOTORS CORPORATION



With the low extra cost, four-barrel carburetor, the Strato-Streak V-8 delivers 200 horsepower (180 h.p. standard). It's the most modern, most advanced engine you can buy.

Pontiac

WITH THE SENSATIONAL STRATO-STREAK V-8

DEAL COOKING WITH RED CHINA?

Communists Hope So, but Ike Says "No"

Dealing with the Reds over American prisoners in China may be only the beginning. The Communists have big plans.

Behind the Geneva conference—

Chou En-lai knows he can't shoot his way onto Formosa. So he's trying to talk his way into possession, and into a lot of other things—trade, the United Nations, the whole works.

GENEVA

The way it looks to many observers in Geneva, the U. S. is being pushed toward recognition of Communist China as a major power in Asia.

Much is made of the point that the U. S. officials speak of Red China as "The People's Republic of China" instead of the "Peiping regime." European diplomats see significance in the fact that representatives of the U. S. and Peiping are meeting together, and that Secretary of State John Foster Dulles says the Communists may be moving in the right direction at last.

Actually, U. S. officials say, these things add up to nothing. A deal with the Reds is still far away. President Eisenhower says that the Communists are still aggressors, that he has no intention of meeting with their leaders to talk thinks over, and that U. S. recognition is out.

But the Chinese Reds—using captive Americans as the bait and helped along by the backing of Great Britain and India—have gotten the U. S. into direct negotiations for the first time. Now the Geneva experts forecast this:

- Red China can be expected to release Americans group by group, accompanying each release with loud noises from Peiping about Communist desires for peace.
- The Communists will campaign for a "peaceful settlement" of Formosa—counting on a build-up of pressure in the West to force Chiang Kai-shek out of the offshore islands of Quemoy and Matsu.
- Meanwhile, negotiations with the U. S. will grow more cordial. U. S. and Communist ambassadors are meeting now. Next the Reds hope for a meeting with Secretary of State Dulles. Eventually they expect to move into the United Nations.

In the background of the meetings between the American Ambassador U. Alexis Johnson and Communist Ambassador Wang Ping-nan is V. K. Krishna Menon, India's ubiquitous roving ambassador.

Menon's role. Long before the Geneva conference was set, Mr. Menon began smoothing a path for it. He visited China, Britain and the U. S. In Washington, he told President Eisenhower that the release of American fliers imprisoned in China could be arranged if the United States would agree to talks with the Communists.

No sooner had the talks opened in Geneva than the roving Mr. Menon showed up. As usual, his public remarks tended to support Red China. For example, he told reporters that any deal to turn Quemoy and Matsu over to the Communists would "take the U. S. off the hook on the offshore islands."

Chou tries an end run. It is clear here that Red China's Premier Chou En-lai is trying to do through diplomatic maneuvering what he failed to do through threats of war—force the rest of the world to abandon Chiang Kai-shek. He is offering to settle Formosa through talks with "local authorities"—which would exclude the U. S. At the same time, he wants a "third party" to look after the interests of Chinese living in America—a deal which would by-pass Chiang Kai-shek whose Government is recognized by the U. S. as the responsible authority over Chinese affairs.

Getting rid of Chiang Kai-shek may not be as easy as Chou thinks. Chiang's is still the official Government of China, so far as the U. S. is concerned. He has a treaty pledging the U. S. to come to his defense if he is attacked. But the experts are convinced that Chou En-lai thinks he can get all he wants without risking war.

China experts watching the conference here say that the Reds got what they wanted in the talks about prisoners—an opening wedge to direct negotiations with the U. S. Now they are determined to move on to "other matters"—the offshore islands, trade, a place in the United Nations and, finally, full recognition by the U. S. The Communists are convinced that if they can keep negotiations going long enough Chiang Kai-shek eventually will fade from the scene, leaving them in undisputed possession of China.

—Wide World

TALK: LATEST WEAPON OF THE CHINESE COMMUNISTS?
Ambassadors Wang (left) and Johnson (center) with a U. S. aide

What President Eisenhower said about talks with Red China—page 28. Freed U. S. fliers tell how Chinese treated them—page 32. A former Governor of Formosa gives his views on what Reds are up to—page 78.

IKE TALKS ABOUT PEACE, DISARMAMENT, RED CHINA

What is the nature of these new American negotiations with Red China? Is the U. S. considering recognizing the Peiping regime?

Has Russia definitely turned down President Eisenhower's proposal for trading information about armaments? And what about those new A-bomb tests in Russia?

These are some of the important questions that were asked President Eisenhower in his news conference last week.

The President has permitted direct quotation of his answers. And following, from the transcript of the news conference, is what Mr. Eisenhower said.

Following are extracts from the transcript of the President's news conference on Aug. 4, 1955, with the President's answers authorized for direct quotation by the White House:

Richard L. Wilson, *Cowles publications:* Mr. President, recently in Congress and in the newspapers the suggestions have been made that some sort of a new negotiation is under way with the Red Chinese which might involve the status of Quemoy, Matsu and Formosa. Is any such negotiation under way, and if not, what is the nature of the present negotiations?

The President: The present negotiations were called to discuss the question of nationals of one country retained within the territory of the other.

Now, it was admitted that the discussions might find other objects, subjects, which could be discussed, but both the Secretary [Secretary of State John Foster Dulles] and I have frequently stated we are not going to discuss the affairs of our friends when our friends are absent. We count the Nationalists on Formosa as our friends. We are not going to discuss their future or their destiny or anything about them until they are there.

Charles E. Shutt, *Telenews:* Mr. President, along that same line, sir, it has been suggested in some quarters that further negotiations be planned with the Red Chinese as a result of the Geneva talks that are going on now. If, after suitable preliminary conferences were held, would you at all favor a "summit" meeting with all parties concerned to settle Asian tensions?

The President: Well, I think not at this time. I think it would be far too much in advance to talk about the possibility of a summit meeting. They have implications that do not follow upon meeting of a—at a somewhat lower level.

Now, I believe the Secretary has said that it is within the realm of possibility that these meetings will lead to negotiations possibly on ministerial level, but I think nothing further has been hinted at.

* * *

Martin Agronsky, *American Broadcasting Company:* Mr. President, it has been remarked that in the negotiations at Geneva, that we have been referring to the representatives of the Chinese Communist Government as the People's Republic of China.

And in return, the Chinese Communists are referring to us as the United States instead of apparently the usual title, which is "a capitalistic aggressor." And generally the atmosphere seems to be one in which people now think there has been a change in the attitude of our Government toward the possible recognition of the legitimacy of the Chinese Government, that is, the Chinese Communist Government.

Has there been any development along those lines, sir, and does this difference in nomenclature that we are now officially using have any significance?

The President: Well, I would say this. The change of nomenclature is without significance, because possibly—I wasn't even personally aware of it, or of any change. When you are sitting in conference and people refer—your conferees may refer to a particular group under a certain name, you naturally are in the habit of referring to it the same way. So this question of nomenclature is without significance whatsoever.

Now, several times I have stated that as long as Red China is branded as a dictator by the United Nations, which it still is, due to the fact that its armies are in North Korea, we have no choice of our own, and I don't know how the United Nations has a choice of its own. There are other outstanding complaints which I have outlined time and again, and I have no idea that under existing circumstances there would be a change of the kind you indicated in our policy.

Robert J. Donovan, *New York Herald Tribune:* Did you say "branded a dictator" or "branded an aggressor"?

The President: Well, I mean "branded an aggressor." If I said "dictator," I was wrong. Branded an aggressor by the United Nations for going into Northern Korea, you will recall.

Robert E. Clark, *International News Service:* Mr. President, Premier Bulganin appears to have rejected your aerial-inspection and military-blueprint plans on the grounds that they are unrealistic.

Can you tell us how you feel about this, sir?

The President: I believe his exact language was that he thought his proposal of May tenth with its provisions for inspection were more realistic than were the suggestions I made. Speaking informally at Geneva, I said if they trusted

that kind of an inspection system, it was all right with us; we would adopt both. And I proposed, I said, let's take them both.

Now, we are engaged here in the beginning of developing methods by which we can tell—we can have great confidence—that the other fellow is doing exactly what he said he would do; and, secondly, we would hope that this would be an approach toward real disarmament.

Now, these are matters that take long examination by experts. I don't understand that the Premier closed the door, and I merely say we are ready to accept and examine any kind of system that looks fair to us and to both sides.

Charles S. von Fremd, *Columbia Broadcasting System:* Mr. President, the Atomic Energy Commission announced today, sir, that from what they, from their own explorations, that the Russians had exploded some type of thermonuclear bomb.

I wonder if you could tell us what significance this means to you, and if it represents possibly something that might not be as optimistic as you felt at the summit.

The President: I believe you made one error in your premise. I do not believe they said "thermonuclear." I believe they merely said an explosion of atomic character.

I am not going to attempt at this moment to interpret this incident in terms of Soviet intent. I would say that if in their scientific development, if they found that they had come to the place where they could go no place further except with tests, they just make tests as a matter of course.

You know, there have been several series since 1949 when the first one, I believe, was detected, and this could mean anything, but not necessarily, as I see it, not necessarily a change in their, let us say, more conciliatory attitude that they have shown in the past weeks and months.

Chalmers M. Roberts, *Washington Post and Times Herald:* Mr. President, I take it, from what you said about Bulganin's statement, you are not discouraged about the prospects of some progress in the field as a whole. Is that correct, sir?

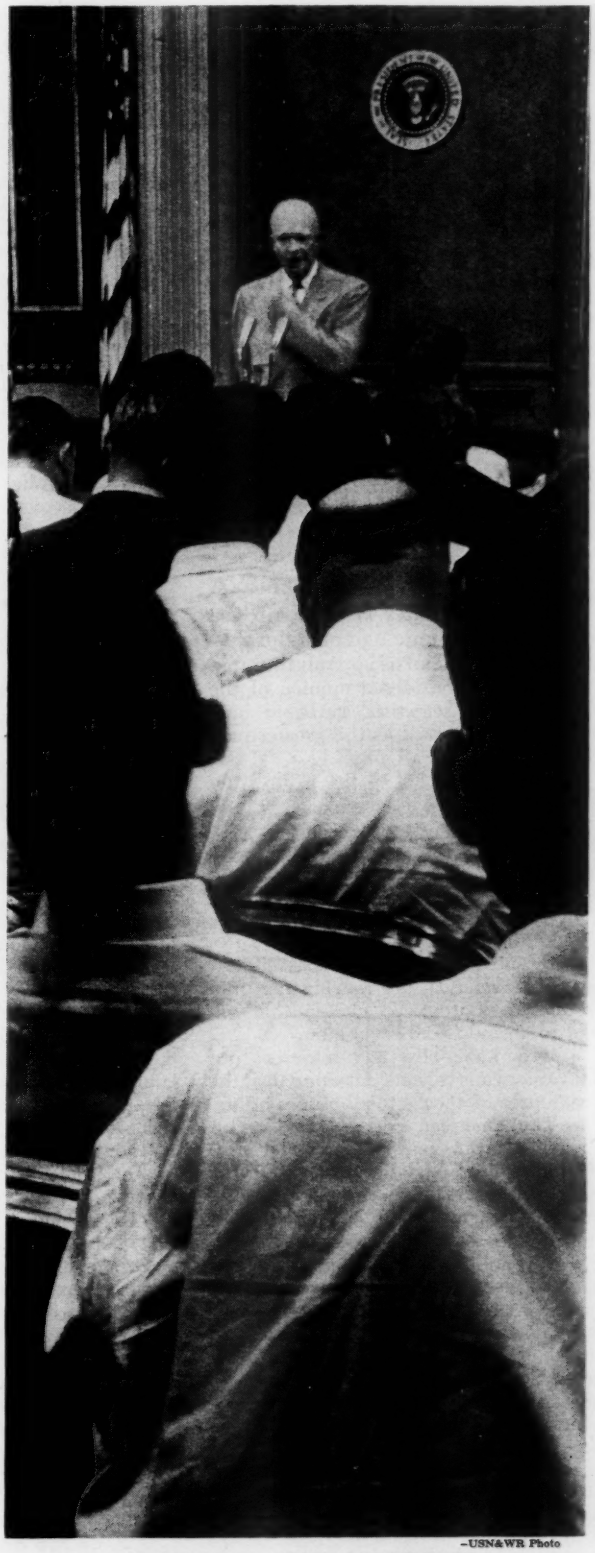
The President: Well, Mr. Roberts, here is the situation: Our Foreign Ministers are going to meet in October, and there was opened up at Geneva a more or less broad road of approach to these several problems which were agreed that the Foreign Ministers should study, and among them was disarmament. So I think that the statements that Mr. Bulganin has made should not be taken as at all foreclosing his readiness or the readiness of the Soviet representatives to discuss the matter.

Mr. Roberts: Could I ask this also, sir? Is it your intention that when the U. N. disarmament subcommittee meets later this month, that the United States will have a new and complete program to offer, or will it be pretty much what you made public at Geneva?

The President: I can't answer in complete detail. As you know, Governor Stassen is working on this constantly and is trying to co-ordinate the views of the several departments of Government, and there will unquestionably be new ideas of more specific type than I expressed at Geneva.

At Geneva I expressed a readiness on the part of the United States to pursue a course of mutual, reciprocal disarmament in any, almost any type where we could be sure that everybody was acting in good faith, and my inspection proposal was just a mere beginning that I wanted to propose of a type of inspection system that would ensure that confidence.

Now, I think, therefore, that you can expect some new proposals, but naturally none of them will be in a final, fixed and rigid position. Otherwise there would be no room for negotiations.



–USN&WR Photo

IKE HOLDS A NEWS CONFERENCE

U.S. AHEAD IN "ATOMIC OLYMPICS"

Others Out to Catch Up in Scramble for Business

U.S. industry, like America's military, is out front in developing atomic energy.

Order books are busy in Geneva, at the world "atoms for peace" congress. Salesmen of 8 nations offer machinery for the atomic age at competitive prices.

The U.S. has an edge in this market. The Germans are moving up fast. From the Soviets, nothing is heard—yet.

GENEVA

The United States is ahead in the race into the atomic age of industry—but not as far ahead as you might think.

That is the considered opinion of the world's atomic scientists, gathered here in what many regard as the greatest scientific meeting of all time.

It is also the belief of the world's top industrialists, many of whom are here in person—prepared to take orders for atomic power plants at competitive prices ranging from 25 million dollars on up.

Here are some conclusions emerging from the "atoms for peace" conference of more than 70 nations:

• Business and industry, both in Europe and America, are moving fast into production of atomic machinery that will lead to an industrial revolution.

• U. S. know-how and resources put the Americans ahead in applying the new source of energy to all phases of life.

• The American lead is by no means unchallenged. As one U. S. scientist says: "If the United States vanished off the face of the earth tomorrow, the rest of the world could easily overtake our atomic science within three years."

• Russian atomic science is neither as good as the Communists claim, nor as far behind as the uninitiated think. It is spotty. In some fields, the Russians are challenging the U. S. lead. In other fields, Soviet scientists not only are making no contribution, but ask questions which indicate that they lag far behind America.

• The international scientific community is re-established, for better or for worse. Americans, Britons and Russians who know how to make hydrogen bombs and atomic power reactors are not just exchanging carefully prepared scientific papers in the halls of the Palace of Nations. They are talking pure and applied atomic science over coffee cups and brandies all around Geneva.

• World hunger for power has reached the point where atomic energy is seen as the only solution in the near future. One paper presented here estimates that the world's energy needs of 1952 will be multiplied nearly three times by 1975 and more than eight times by the year 2000. In many countries, notably China and India, the market for power already is considered large enough to make it economically worth while to develop atomic energy.

Role of businessmen. What is beginning to stack up as perhaps the most important aspect of this conference is the part being played by U. S. and European business firms.

At the Palace of Nations, hundreds of businessmen are on hand. American bankers and industrialists, alone, claimed nearly 300 seats as "observers." Top officials—presidents and vice presidents—of major firms are found everywhere.

Downtown, an atomic "trade fair" is showing even more spectacular evidence of just how far atomic energy has gotten into commercially competitive fields.

There, you find a strictly competitive atmosphere among commercial exhibitors of eight countries. France, next door to Switzerland, found it easy to send 43 exhibitors. Britain has 26, the United States 22, Switzerland 11, West Germany 8, Italy 5, Belgium 4, and the Netherlands 2. Soviet Russia is not represented by commercial exhibits.

These exhibitors make no bones about it—they are out to sell reactors and other atomic tools to governments that are represented at the scientists' meetings.

"Those long-haired scientists tell you that theirs isn't a competitive show," one British exhibitor said. "Well, this is. Want to purchase a fine reactor cheap?"

The British, who are selling the hardest, agree with the French that their main competitors—when and if atomic fuel is available to all on a commercial basis—will be the Germans.

"Those Germans are just waiting around until the buyers are ready. Then they step in and offer to build the same machine at a big discount and on credit," a Frenchman complained.

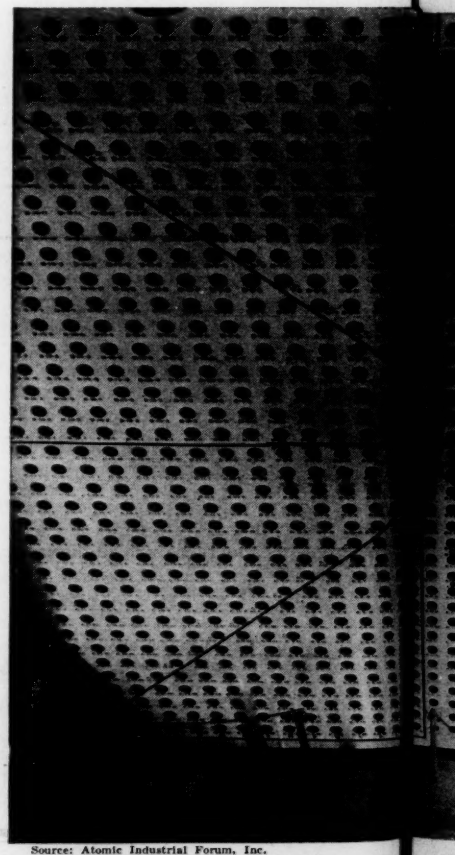
U.S. on top now. It is the U.S., however, with its large stocks of atomic fuel, that seems to have an advantage right now. And British exhibitors are bitter about it. One of them said:

"Your Government peddles research reactors on a tie-in-sale basis, providing the fuel on loan. Your companies can hint that, if India or some country buys a reactor from them, they will find the means of locating the fuel through Uncle Sugar. That's unfair competition."

The U. S., too, is far ahead in atomic showmanship in the official exhibits sponsored by governments at the Palace of Nations.

The Soviet delegates are proudly showing movies and reading papers about their 5,000-kilowatt power reactor, which they say is the largest now operating to produce atomic energy for peaceful purposes.

The British are telling everyone that they alone are actually engaged in a project to substitute atomic power for



Source: Atomic Industrial Forum, Inc.

expensive, coal-produced electricity. That project, at Calder Hall, employs a gas-cooled reactor that is stirring interest among American scientists who once turned down that type.

A "live" exhibit. It is the U. S., however, that has the only truly "live" atomic exhibit in Geneva—a "swimming pool" reactor suspended in water that serves as a radiation shield, permitting people to watch it operate.

As a result, the 1,000 or so scientists here are trooping like schoolboys into the neat building that houses this exhibit behind the Palace of Nations.

There, they stand fascinated as American attendants from Oak Ridge step up the operation of the reactor until a blue glow radiates from the bottom of the water-filled tank.

"They all act like they knew it would work and know how it works, but never believed it until they saw it operating," one U. S. attendant said.

On top of that exhibit, the United States has taken the lead in other types of Government displays—of photographs, publications and models of reactors and other atomic machinery and tools. There is much interest in a technical-library display of 5,000 books and documents dealing with atomic energy. This library, sent over by the U. S. Atomic Energy Commission, is to be given to the United Nations after the conference.

Smoking out Reds. The feeling here is that the West is smoking out some Soviet secrets on Russia's atomic progress.

During the last four months, 19 scientists have been serving as "scientific secretaries" for this conference—including three each from the Soviet Union and Britain, two each from the U. S., France and Canada, and one apiece from India, Pakistan, Yugoslavia, Czechoslovakia, Argentina, Brazil and Japan.

At the start, both the Americans and the Russians were wary. Now, however, the 19 scientists are thoroughly at ease with one another. They stick together socially as well as in their work. The secretary-general of the conference, Prof. Walter G. Whitman, of the Massachusetts Institute of Technology, has high praise for his Soviet deputy, Viktor S. Vavilov.

One Western scientist sums it up as a "new era of co-operation," but he adds:

"It has a long way to go. After all, the Russian 'revelations' only mean that they are revealing 'something'—whereas, previously, they had revealed nothing. But what was started is now ripening into a scientific exchange which may go further than either Washington or Moscow intends."

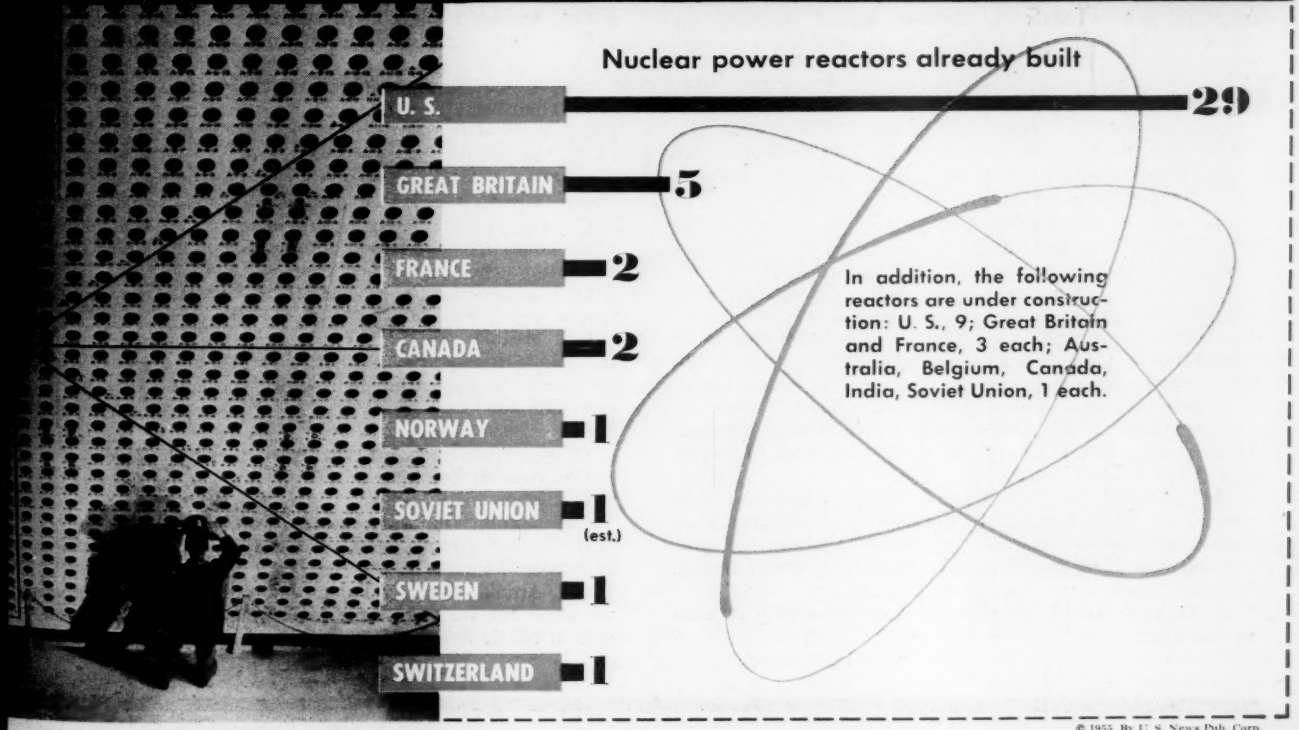
Businessmen and scientists alike foresee the world moving faster into the Atomic Age as a result of this world conference and others like it that are almost sure to follow.

As a co-operative venture, the conference is seen to be a step toward some kind of world authority over atomic fuel—to promote atomic development for peace instead of war. People are impressed by the way in which scientists of many nationalities, including Russian, are sitting down together and talking as they have not done for years.

As a competitive exhibit, the meeting is making an even stronger impression on some onlookers. They find not only governments but business firms jumping into the race to cash in on the peaceful uses of atomic energy.

The U. S., at present, holds a lead over Russia and other countries. But its lead is not sure-fire in an atomic race that is carrying the world toward its biggest industrial revolution in modern times.

HOW THEY STAND in the atomic-power race . . .



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ONE MORE MEASURE OF HOW FAR REDS CAN BE TRUSTED

Fliers Tell of Trumped-Up Charges and Cruelty

Here, in their own words, is the story brought back by 11 U. S. airmen just released from 2½ years' imprisonment in Red China.

In this verbatim record of the press conference held four hours after their release, a U. S. Air Force attaché acted as "censor," ruling out many questions.

But the story of their capture in North Korea, their mock trials as "spies," their imprisonment as common criminals, their treatment, all came out in considerable detail.

These excerpts from the transcript of the conference held by the airmen were cabled to *U.S. News & World Report* from Hong Kong.

After 30 months' imprisonment in Communist jails, 11 American airmen crossed the bridge into free Hong Kong on August 4, agreed to meet the press a few hours later.

Most questions at the initial press conference that followed were answered by Col. John K. Arnold, Jr., senior officer of the group. Colonel Arnold obviously had the toughest time while in captivity. For the first eight months he was interrogated intensively. After that he was in solitary confinement for 22 months. He showed signs of the ordeal. His cheeks were shrunken, his face drawn, his body wasted. But he was eager to talk.

Compared to Arnold, the others appeared fairly healthy, although Maj. William H Baumer moved painfully on crutches as a result of a leg wound incurred when he was shot down.

The conference, held at the Royal Hong Kong Golf Club, went like this—

HONG KONG

Q: Colonel Arnold, when were you first informed you were going to be tried as spies by the Chinese?

Col. John K. Arnold, Jr.: Yes, I'll tell you exactly: at 20 minutes past 3 on the 10th of October, 1954.

Q: How did they notify you?

Col. Arnold: They gave me the charge sheet that, well, actually, they gave me the charge sheet that said that we had come into China to spy and all the rest of that stuff. They gave it to me at 3:20 and, uh, right from there I was handcuffed and taken downtown. And we went into that trial.

Q: In what city was that?

Lieut. Col. O. D. Simpson (U. S. Air Force Attaché): Don't answer that. I'm sorry. We don't want them to go into that detail at all.

Q: Colonel Arnold, was there a trial at which you were present or were you simply notified after you had been sentenced?

Lieut. Col. Simpson: I'm sorry. That's a matter of record. We don't want to go through that again.

Q: Colonel Arnold, are you aware of the Peking account of that trial?

Col. Arnold: I don't know what account they have released of the trial.

Q: There was a trial?

Col. Arnold: I would not have recognized it as such except that they told me afterward that that's what it was.

Q: Was there a courtroom?

Lieut. Col. Simpson: Please, let's don't exercise this point any further.

Q: Colonel Arnold, are you aware of the fact that an exhibition was held in Peking in which was shown the alleged equipment from your plane and also that your alleged confessions were posted on the wall?

Col. Arnold: I knew there was an exhibition.

Q: Colonel Arnold, when did the Chinese Communists tell you that you were to be released?

Col. Arnold: Sunday night about 7 o'clock. This past Sunday. That was the 31st of July, the greatest day there ever was.

• • •

Q: Well just how did the Communists notify you?

Col. Arnold: We were told there was going to be a party. We gathered in a room in the prison and were told we were going to be released immediately. One hour later—at 10 p.m.—they put us on a train.

Q: How did the Communists treat you after they notified you of your release?

Col. Arnold: We didn't pay much attention to what they were doing after Sunday night. I don't really know. We had the American Red Cross packages. I spent my time talking. I've been talking ever since 7 o'clock Sunday night.

Q: Were you escorted down from Peking?

Col. Arnold: Yes.

Q: By how many men?

Col. Arnold: Oh, about two for one I guess.

Q: Colonel Arnold, could you tell us just how you were captured?

Col. Arnold: Actually I don't know the exact spot where we were but we were on a leaflet mission against six targets in North Korea. We were picked up by lights over the

. . . "When captured we were told we were prisoners of war"

third target. We continued and dropped on the fourth target. We dropped on the fifth target. And actually just as we pulled a drop on the sixth target we knew we had to abandon the aircraft.

° ° °

Q: Could you tell us where that sixth target was?

Col. Arnold: I can tell you generally. I don't know the name of the little town. It was No. 6 as far as we were concerned. It was very near the coast. And as I recall, well, 35 or 40 miles or so south of the Yalu River. It may have been a little farther than that.

Q: Did you bail out or make a crash landing?

Col. Arnold: We bailed out. At the time we bailed, when Captain Vaadi [airplane commander] gave the signal to bail—he can give you more in detail—we had [Air Force "censor" Colonel Simpson interrupted to whisper something] we bailed and from there on it was pretty much an individual story. I only know my part from there.

I bailed and was picked up by troops the next morning. That is, it was about 10 o'clock at night when we bailed out and I would say that I was captured at perhaps 8 o'clock the next morning.

Q: Were you captured by Chinese or North Korean troops, Colonel?

Col. Arnold: At the time I didn't know. They told me four days later that they were Chinese troops.

Q: But weren't you familiar with the differences in uniform between North Koreans and the Chinese? How were they dressed?

Col. Arnold: Now I know that the troops were Chinese.

Q: They definitely were Chinese?

Col. Arnold: Yes.

Q: When you were picked up, Colonel Arnold, were you in North Korea or in Chinese territory?

Col. Arnold: I had no suspicion, nor did anyone else—when we were first captured we were told that we were prisoners of war. We would be treated in accordance with the Geneva Convention. And for the next few days we were told we would go to the prison camp. And it was not until Friday afternoon—the 16th of January—that out of a clear sky they came out with this crappy story about our being down in China.

Q: Were you moved anywhere between January 12, when you were shot down, and January 16?

Lieut. Col. Simpson: Don't, don't let's get into that, please.

Q: Could you tell us, Colonel Arnold, when you and the others crossed the Yalu River into China?

Col. Arnold: I'll answer that. I'd like. It was on a train on the late night—just before midnight or the early morning—of the 16th-17th of January, 1953.

Q: You crossed the Yalu River?

Col. Arnold: Yes. The 16th-17th of January. That is, I left where I was Friday night and I arrived in a place that I recognized as definitely within China on Saturday morning.

° ° °

Q: Captain Vaadi, can you tell us about the MIG attack and about the conditions under which you bailed out?

Capt. Eugene J. Vaadi: We were in the lights. We were attacked simultaneously—almost simultaneously—by two MIG's with quite intensive aircraft fire and they also loosed rockets. Our 2, 3, and 4 engines were on fire and we were burning very badly. We were very badly damaged. I gave the order to bail and we all bailed out.

Q: What time was that?

Capt. Vaadi: Approximately 10:40 p.m.

Q: We've heard from Colonel Arnold how he was captured. Could we hear from the others? Did they believe they were in North Korea or China?

(Continued on page 34)

—Wide World

AN EMACIATED COLONEL ARNOLD SPEAKS IN FREEDOM AFTER 30 MONTHS IN THE HANDS OF THE REDS
"I would not have recognized it as [a trial] except that they told me afterward that that's what it was"

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. . . "After four days I was in prison as a criminal"

Lieut. Col. Simpson: There's no question about that. They were in North Korea.

Q: All of them were in North Korea?

Lieut. Col. Simpson: Yes.

Q: Were all of them captured together?

Lieut. Col. Simpson: No.

[Colonel Simpson asked if any two were captured together and all shook their heads negatively, indicating that each had been captured individually.]

Q: Colonel Arnold, could you tell us what happened to you from the time you were captured until the outside world received news of your trial?

Col. Arnold: I don't know when you had the news.

Q: Last November.

Lieut. Col. Simpson: No, no. I think we've exercised that point too long.

Q: Well, can you tell us, Colonel, whether you were held in a prisoner-of-war camp or an ordinary prison between the time you were captured and your trial?

Col. Arnold: I was held for four days the way a POW would be held, but I hadn't actually gotten to a POW camp. After that, everything changed on the 16th [January, 1953] when they came in with this story [accusing the fliers of landing in China]. After that I was in prison as a criminal.

Q: Then you were never treated as a POW after the first four days in captivity? That is, you were never put in a POW camp.

Col. Arnold: I never was in a POW camp.

Q: Was your experience typical of the others?

Col. Arnold: Yes, mine was typical.

What Happened in Prison

Q: What did you do while you were in prison? How did you spend your time? Reading? Exercising?

Col. Arnold: Well I was interrogated for the first eight months. And I sat in a cell for 11 months. Then I sat in a cell until last Sunday.

Q: Were you in solitary confinement?

[Arnold nodded his head affirmatively.]

Q: Did you lose any weight?

Col. Arnold: I don't know how much I weigh now, but I weighed 175 pounds when I was captured and you can look at me and see I don't weigh anywhere near that much. I'd guess I weigh about 135.

Q: Colonel Arnold, were you subjected to political indoctrination at any time?

Lieut. Col. Simpson: Don't answer that.

Q: Do you men feel that the Chinese Communists complied with the Geneva Convention in the way they treated you?

Lieut. Col. Simpson: I think we had better not go into that.

Q: But that's a question relating to their health and welfare—

Lieut. Col. Simpson: Yes, I know, but—

Q: Well, was the food adequate? Captain Llewellyn wants to answer that. What about it, Captain?

Capt. Elmer F. Llewellyn: You wouldn't eat it. Not a one of you guys.

Q: What kind of food did you get?

Capt. Llewellyn: Mostly rice. And we can't overlook the cabbage. *(Laughter.)*

Q: Can't overlook the cabbage?

Capt. Llewellyn: Not by a damn sight. It was plain, boiled cabbage, unseasoned. The water poured off it.

Red Cross Parcels: Late

Q: When did you start receiving Red Cross parcels, Colonel Arnold?

Col. Arnold: We got them last Sunday night at about 9 o'clock. That was two hours after we got the notice of release.

Q: You mean, sir, that was the first time you received Red Cross parcels?

Col. Arnold: That was the first time and the only time that we got them. We got them about two hours after we were notified that we were to be released.

Q: Did you learn about the visit of Mr. Hammarskjold [Secretary General of the United Nations]?

Col. Arnold: Yes, three or four months after it was made I did.

° ° °

Q: Well how do you fellows feel about getting out? How do you feel, Benjamin?

Airman Harry M. Benjamin, Jr.: I think it's wonderful.

Lieut. Col. Simpson: Anybody who doesn't feel wonderful about getting out? *(Laughter.)*

° ° °

Col. Arnold: I'd like to say that we figured out a long time before we got here that we hadn't been forgotten back home. And we knew that it was largely due to that fact that we were on our way out. And we sure have appreciated having that confidence in our own people and our own country. It's been wonderful.

Q: Colonel, do you think the Peking Government is entitled to any credit for releasing you now?

Col. Arnold: Not a goddamn bit. *(Laughter.)*

LIFELINE
OF
MODERN
LIVING!

Take a look around you. That modern car in the driveway—the range and refrigerator in the kitchen—the hot-water heater in the basement—even the children's toys in the playroom. Unless you're an engineer, you may not know that all these things have one thing in common . . . *steel tubing!* And if you *are* an engineer, you'll know that the best steel tubing is GM Steel Tubing by Rochester Products . . . that you can rely on Rochester for the right tubing to fit your needs. So let Rochester call the turn on your tubing problems. See a Rochester Products engineer, or write direct for further information.

GM STEEL TUBING BY ROCHESTER PRODUCTS

ROCHESTER
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GENERAL MOTORS
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Gentlemen...

the royal scotch... fit for a **King**

"Here's tae ye!"—the true Scot's toast, is clearly indicated when the Scotch is King George IV. Known around the world for its rich body and rare flavour, King George IV now awaits your pleasure here.

"King George IV"
SCOTCH WHISKY

FEW SUCH PLEASURES COST SO LITTLE

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WHAT VISITING RUSSIANS REALLY THINK OF U. S.

Admire Colorful Cars, Air-Conditioning . . . Shy at Comparisons

What are the visiting Russian farm officials really impressed by? How do things in the Midwest compare with their homeland? What do they hope to find out in America?

To get the answers, *U. S. News & World Report* assigned a Russian expert, who speaks the language like a native, to accompany the visitors from their arrival at New York through their tour of the Midwest.

For three weeks, he has had a rare opportunity to observe the Russians at close range, catching their off-guard observations, their personalities, their reactions to the U. S.

This is his report.

MINNEAPOLIS

The efficiency of American farmers is not the only thing that amazes the 12 Russian farm officials now touring the rich farmlands of the Midwest.

They are overwhelmed by the American standard of living.

The freedom of the individual in America is a continuing puzzle to them. They find it hard to believe that farmers here don't have to run their farms by Government decrees.

Surprisingly, they are showing an intense interest in the economic side of U. S. farming, especially the profits of the individual farmer.

The Russians, it is obvious, had not been prepared for the abundance of automobiles, household appliances and gadgets that exist in the U. S. for the convenience and comfort of Americans. Their eyes bugged at their first look inside an Iowa farm home. But, with reporters around, they soft-pedaled their enthusiasm.

Fascinated by gadgets. Later Nikolai Gureev, a high official in the Russian Ukraine, was invited to eat supper with a farm family while the rest of the visiting Reds continued on to an evening meeting. As soon as the meal was over he inspected the house and its furnishings with unconcealed amazement. He was fascinated by the kitchen with its electric refrigerator and stove and built-in cabinets, the television set in the living room, the food freezer and automatic washer in the basement.

"We do not have gadgets in Russia," another Russian confided to the farmer with whom he spent the night. "We are devoting all our efforts to rebuilding our country after the devastation of World War II."

The farmer, of course, did not point out that many European countries outside the Iron Curtain learned about devastation during the war, too, and have outstripped Russia in rebuilding—under a capitalistic system—and are now able to go in for gadgets.

With temperatures in the corn belt soaring to 100, or better, day after day during their tour, the visiting Russians could hardly hide their appreciation of the air-conditioned bus that carries them from place to place.

Said Alexsandr Tulupnikov, an agricultural economist high in the Communist bureaucracy: "Of course, air-conditioning is wonderful. A man is hot and you cool him off. Who could possibly object to that?"

Mr. Tulupnikov is also frank in his admiration of American automobiles. "They are so many beautiful colors," he says. "They brighten the streets."

Vodka and hot dogs. While the American farmers visiting in Russia have complained of being plied with too much vodka, the Russian farm officials touring the Midwest have not lived up to the reputation of their countrymen as big consumers of the Russian drink. On the few occasions when it has been served, they have limited themselves to one or two drinks. Whether this is due to personal temperance or in the interests of public relations, no one has been able to find out.

Their familiarity with the varied American diet indicates that, as officials high in the Soviet Government, they are used to eating well. Such things as hot dogs, watermelon and ice-cream sodas are new to them, but they eat these American dishes with obvious relish.

The visitors have been evasive in answering queries about diet in their country, as they have with most questions seeking a comparison between Russian and American standards of living. When asked about the amount of meat available to the average Russian the answer is vague—"enough for good health," or "I don't remember the figure."

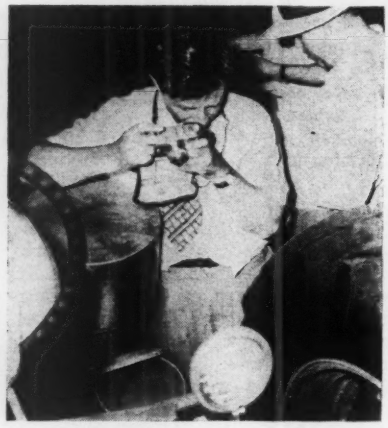
Though Russian statistics on such things are rarely available outside the Iron Curtain, Soviet

—Crockett in the Washington Evening Star

"YOU MEAN THIS IS ALL YOURS?"
. . . a keen interest in profits, too

RUSSIAN VISITORS DON'T MISS A TRICK

INSPECTING TRACTOR MOTORS



SNAPPING LOTS OF PHOTOS

SIZING UP EGGS

—Lincoln Journal-Star, Wide World

LEARNING ALL ABOUT BEEF

The earnest Soviet delegation has filled hundreds of notebooks

farm experts in this country point out that in 1928 the average Russian was getting 40 pounds of meat a year. Now, with 60 million more people and fewer livestock, the annual ration is even less. In the U. S., it is estimated, meat consumption will be 160 pounds per person this year.

That red meat is in short supply in the Soviet Union was inadvertently confirmed by Vladimir Matskevich, top man in the Russian farm delegation. On visiting a chicken hatchery, he commented: "Eggs and chicken meat are the main diet of the Russian people, but mainly eggs."

U. S. movies O.K., but . . . The Russian visitors, generally speaking, seem to like American movies in spite of the fact that they must get the dialogue secondhand through an interpreter.

After several of them saw Marilyn Monroe in "The Seven Year Itch," one said, "She's not bad!" However, another was distressed at the mixing, in the same picture, of Miss Monroe and music by Sergei V. Rachmaninoff, a Russian composer.

Americans who saw the picture with the Russians agreed that Petr Badmindra, director of a big Soviet state farm, put his finger on a basic fact of American moviemaking with his comment: "It seems to me that she [Miss Monroe] is not there for the sake of the picture, but instead the picture exists for her."

But enthusiasm over gadgets, the delight at relaxing in air-conditioned comfort and the continual round of picnic and banquet fare have not taken Soviet eyes off the purpose for which they came.

That purpose is to carry back to their boss, Nikita Khrushchev, a report on American farming methods that will be the most exhaustive ever to be written by a farm delegation to this country.

Every minute that they are visiting farms, grain elevators, machinery plants, and college experiment stations the Russians are on the ball. They have filled hundreds of notebooks. They use cameras to photograph anything that could conceivably add to their report.

Freedom of U. S. farmers. The freedom of the individual in the United States continues to puzzle these Communist officials. At Iowa State College, during the first week of their junket through the corn belt, the director of the agricultural school was explaining the relationship of the college to the U. S. Department of Agriculture in Washington, to extension workers in each Iowa county and to farmers. This brought a flood of questions.

It was necessary to explain at length that the Department of Agriculture could not tell Iowa State College what to do; that Iowa State College officials

could not dictate to farmers what they must do; that the county extension workers only made recommendations to farmers; that the farmers depended on the market place to guide them as to what crops to plant and what livestock to raise.

The Reds, though they obviously didn't understand fully such a system, accepted the explanation. However, they have been double-checking it from time to time along the way. In South Dakota, they asked a wheat farmer whether he had to do what the county extension agent told him. "Of course not," came back the answer. "If I want information I ask him."

Account-book study. An unexpected development is the Soviet farm officials' eagerness to get the details of the dollar-and-cents side of American farming. They are overjoyed when a farmer opens his account book so they can see his expenses and profits per hog, per hen, per acre. They want to know his net income, his total expenses, how much tax he pays to the Government.

This concern with profits seems strange to those not familiar with the details of the Communist system. But to students of the system it is perfectly logical. The Communists insist that each unit in their system must show a profit for the state.

Obviously, the Communist farms are not measuring up to expectations. This was admitted last winter by Khrushchev, who chastised the peasants for their shortcomings. So, if the Russian farm officials can carry back to Moscow the details of profits made on American farms, Khruschchev can set up some goals for the peasants to shoot at.

The visitors are making careful notes on how much individual farmers in the U. S. receive for their work. This is seen as an indication that they will use this as a guide to set up more lucrative payments to peasants who increase their output.

Thus it becomes clear to those who have watched the Russian farm delegation closely during its three weeks in the Midwest that the Kremlin intends to do more than inject a large dose of American technical know-how into the Communist system of farming. Russian peasants are to get a taste of the capitalistic profit system. It will, however, be a small taste. Mr. Matskevish has said plainly that the Soviets have no intention of parceling out the state-owned farm lands to the peasants.

It is clear, too, that the intimate glimpse of America afforded to the Russians on their U. S. junket has impressed them deeply. Farmers and officials in the States where they have visited are convinced that some of that impression is bound to rub off on their comrades when they return to Russia.

THERE'S A LIGHT SIDE TO THE TOUR

THE WONDERS OF AN AMERICAN DRUGSTORE

DISCOVERED—WATERMELON!

A WHACK AT SOFTBALL

—USN&WR, Wide World, Des Moines Tribune

THE TOURISTS EAT WELL, DRINK LITTLE
And they are overwhelmed by the U. S. standard of living

Despite Peace Talk . . .

DEFENSE STAYS AT 40 BILLIONS

More for Missiles, A-Weapons; Less for Planes, Guns

Will current peace moves result in industry's losing billions in defense contracts? The answer is no, at least for a year.

Reason: Spending for national security now is firmly set at 40 billions, barely below outlays for last year.

Shifts in the direction of arms spending could affect your firm's business, however.

After all is said and done about peace, the fact is to remain that this country will spend for defense in the year ahead just about as much as in the year just past.

Money now is provided by Congress. Budgets are firmly made. Wheels are turning in the new spending year that started July 1. Before this fiscal year is out, more than 40 billion dollars will have flowed through the channels that are designed to assure national security.

In the year ended June 30, spending for defense amounted to 41.1 billion dollars.

What this means is that business will continue to draw strong support from spending for defense. Peace talks, at least for another year, will not be translated into drastic cuts in the armed forces or in activities supporting them.

There will be some changes, however, in the direction of the flow of dollars, as the chart on page 41 shows. There will be less money going to some types of business, more to others. Some companies will find their defense business rising, others will find it declining.

Payrolls of the services are going to decline. This is to be true despite the recent raise in military pay rates, because personnel strength in the services is being reduced. Businessmen catering to servicemen's personal wants may, in some areas, find that they are getting fewer dollars.

Where increases come. At the same time, however, there will be more defense dollars for some lines of industry—those contributing to the development of guided missiles, for example. This is the big field for future expansion. The aviation industry is involved in guided-missile work which will help offset the cut in dollar outlays for new planes.

An even bigger increase in the flow of defense dollars is to go to the construction industry in the fiscal year ahead. Bases are to be expanded, to the tune of nearly 2 billion dollars, in many areas of the Southern and Western U. S., on the continent of Europe, on islands in the Western Pacific.

The shipbuilding industry, dependent largely on Government orders, also can expect more, rather than fewer, defense dollars in the coming year. Plans here are expanded to include construction of 34 vessels, including a fifth carrier of the *Forrestal* type and eight submarines—three of which will be atomic powered—plus 13,370 tons of landing craft. That's in addition to the conversion program now under way.

Then there is a planned increase approximating a billion dollars in foreign military aid. Some of this is in goods produced abroad under U. S. contracts, but industry at home is to benefit as well—principally firms producing finished "hard goods" such as vehicles and weapons. Deliveries of ammunition, too, will be increased considerably during the year, by both U. S. and foreign firms.

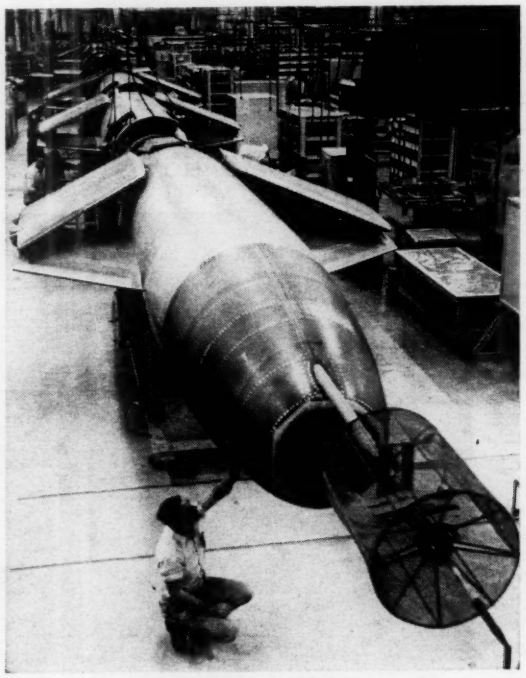
Somewhat less is to be spent, on the other hand, for basic, "strategic" raw materials for the stockpiling program.

Most other items of defense spending are to continue at about the current rate, under the money plan now approved by Congress.

Military stocks down. Orders for an infinite variety of things used directly by men in uniform will hold up, in fact, even with a cut in uniformed manpower. The reason is that, since the end of the Korean war, the armed services have been using up their large stocks of food, clothing, ammunition and personal equipment. Those stocks now have been drawn down, so that the services expect to have to order new material about as fast as existing stocks are used up.

Only a slight drop is in sight, moreover, for the automobile industry in its deliveries of trucks, jeeps, tanks, sedans and specialized military vehicles. An even smaller variation in spending is planned for the electronics and communications industries. Production of things such as long-range radar, for early-warning defense installations, is set to increase, to offset decreases in spending for more conventional equipment.

Other major items bought directly from industry also will continue to be purchased at about the same rate. Gasoline, oil, spare parts, thousands of other things used to operate and maintain the military forces around the world will be purchased at a rate that, over all, will be somewhat greater than last year's. Somewhat less heavy equipment, however, may be bought in the months ahead.



FOR GUIDED-MISSILE PRODUCTION . . .
. . . more defense dollars

Indirect spending with industry is to hold up. Outlays for research-and-development programs are scheduled for a gradual rise, with more than a billion dollars in indirect orders for supplies and equipment involved. The same thing applies to atomic-energy outlays, with 2 billion to be spent in the coming year by the Atomic Energy Commission.

Plane orders: still big. The only outlay due for a sizable drop in the new budget is that for aircraft, and this cut is more apparent than real. Of the billion-dollar cutback shown in the chart, much is a complex bookkeeping transaction and the rest results from the fact that the Air Force for the past year has been paying for deliveries ordered during the build-up set off by the Korean war. Planes still will be bought at a heavy rate, with the Air Force continuing to expand toward its mid-1957 goal of 137 air wings.

Nor is there any big change in sight in the source of defense orders for industry. The Army is taking the biggest cut in size this year, but its total spending is actually to be increased a little, to 8.9 billions. The Navy, with slightly fewer ships to maintain, will spend a very few dollars less, with a forthcoming budget of 9.7 billions. The Air Force, while expanding in size, is taking a minor cut in spending power, down half a billion to 16 billions. This, at least, is the plan now, with 1.2 billions in defense-spending cuts yet to be allocated.

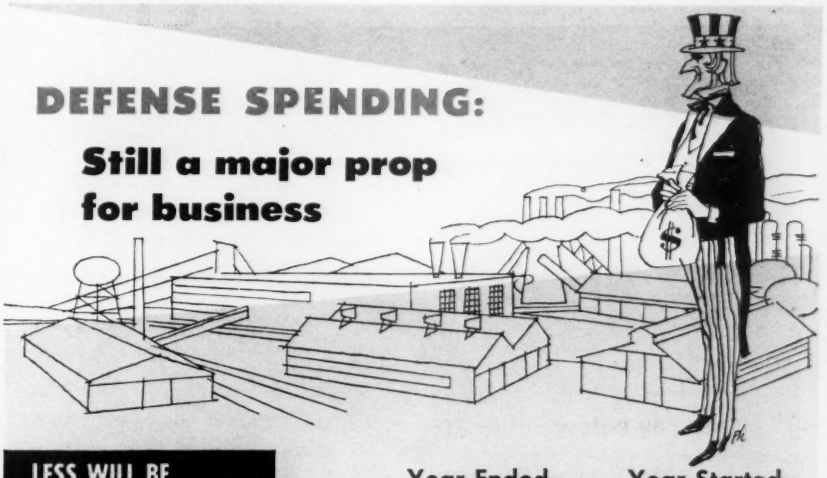
How long can industry count on defense orders at this level?

Before the latest peace moves began, Defense Secretary Charles E. Wilson stated as his opinion that the present rate of spending probably is "rock bottom." That rate is assured now for at least another year. What happens after that, however, will depend on the effectiveness of peace moves taking place in the meantime.

Arms spending will continue high in the billions for the foreseeable future, in other words, despite efforts right now to work out a practical disarmament. Military spending at 34 billions is assured for at least a year, plus atomic-energy, stockpiling and military-aid outlays that bring the national-security total to 40.5 billions.

What's happening now is a gradual shift in types of defense spending. For the year ending in mid-1956, more will be spent for new automatic weapons, for faster ships, bigger bases, better research equipment, more complex electronic gear —and less for unprocessed materials to be stockpiled, for GI pay, for planes ordered during the Korean war. But total orders will be just about as big as in the year just past.

DEFENSE SPENDING:
Still a major prop for business



LESS WILL BE SPENT FOR—	Year Ended June 30, 1955	Year Started July 1, 1955
Pay of servicemen	$10,580,000,000	$10,510,000,000
Airplanes	$ 8,218,000,000	$ 7,260,000,000
Tanks, trucks, other vehicles	$ 767,000,000	$ 647,000,000
Radar, radio, other communications	$ 707,000,000	$ 695,000,000
Other major procurement	$ 311,000,000	$ 260,000,000
Stockpiling	$ 802,000,000	$ 783,000,000
BUT MORE WILL BE SPENT FOR—		
Gas, oil, maintenance	$ 7,663,000,000	$ 8,358,000,000
Ships	$ 903,000,000	$ 966,000,000
Missiles, other weapons	$ 529,000,000	$ 756,000,000
Ammunition	$ 1,050,000,000	$ 1,243,000,000
Military construction	$ 1,493,000,000	$ 1,842,000,000
Reserve forces	$ 715,000,000	$ 861,000,000
Research and development	$ 1,326,000,000	$ 1,332,000,000
Atomic energy	$ 1,856,000,000	$ 2,000,000,000
Military aid abroad	$ 2,601,000,000	$ 3,675,000,000
TOTAL SPENDING FOR NATIONAL SECURITY:	$41,107,000,000	$40,458,000,000

NOTE: Total for the year ended June 30 includes some spending for which details are not yet available. Total for the year started July 1 allows for major cuts still to be allocated.

Source: Defense Dept. and Treasury Dept.

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Directed at the new *togetherness* of today's woman and her family,

McCALL'S SETS THE STAGE FOR SELLING...

How to give your product star billing

Readers buy magazines for their editorial content. *What's in the magazine* not only reflects their mood, but, as they read, stimulates and intensifies it.

That's why advertisers who want the most responsive audience for food, home appliances, home furnishings and the like, choose McCall's—because McCall's offers more readers *in an interested mood.*

McCall's editorial content aims at the new *togetherness* of today's woman and her family—a sociological phenomenon that has done more for the home and *brought more into the home* than anything else in recent times.

Buy "numbers" if you must. But be sure they're numbers of people who are *in the right mood when they come upon your message.* No other magazine better sets the stage for selling the woman and her family than McCall's with its appeal to family *togetherness.*

And advertisers are aware of McCall's unique effectiveness. At the half-way mark this year, they have contracted for more space in McCall's than during the *entire year* of 1954!

McCall's

the magazine of *togetherness*

Worldgram®

FROM THE CAPITALS OF THE WORLD

BELGRADE....MOSCOW....BONN....BUENOS AIRES....

>> U.S. is losing, Soviet Russia is winning in the competitive wooing for the hand of Marshal Tito of Yugoslavia. As a result.....

Billion dollars in U.S. aid to Tito may have to be written off.

Defense line across Southern Europe is disrupted, if not wrecked.

"Neutral" zone down the middle of Europe, from Baltic to Adriatic, is in the making. It's a pet Soviet scheme. Most "neutrals" involved are Communist.

Tito's usefulness to West is apparently at an end. Whether or not Moscow can rely on Tito when the chips are down, it's now clear that U.S. can't.

In a matter of weeks, a few gestures by Moscow to win Tito back seem to have paid bigger dividends than years of rather generous aid from the U.S.

Old Communist ties exercise a stronger pull on Tito than U.S. dollars.

>> In Belgrade it's noticeable that Marshal Tito is feeling his oats.

He's telling U.S. he'll do without aid, if U.S. insists on knowing what he is doing with U.S. planes, guns, dollars. He's berating his neighbors, Soviet satellites, for failing to co-operate with him. He's telling Moscow he'll return to the fold on his own terms--as a partner, an equal, not a satellite.

>> Tito has apparently convinced himself, without too much difficulty, that he is now strong enough and smart enough to handle anybody.

He broke with Stalin, something no other satellite leader dared do. Now, with Stalin dead, Tito figures he can capitalize on his 1948 break.

He can handle Americans, Tito is quite sure. He thinks he has U.S. over a barrel. If U.S. cuts off aid, Tito can threaten to rejoin Moscow as military ally. U.S. may figure aid worth continuing to keep Tito at least neutral.

Stalin's successors don't scare Tito. He's confident he can handle them.

After all, Tito maneuvered it so that the Soviet leaders, not Tito, made the first moves in the reconciliation. He didn't go crawling to Moscow. They came on their knees to Belgrade, and publicly asked his forgiveness.

They have since canceled a debt of 90 million dollars contracted by Tito before the break with Stalin, and now offer to resume full trade relations.

Tito's dream of a Balkan federation, with himself at the head, is probably back in Tito's thoughts. At any rate, Moscow hasn't slapped it down lately, and shows Tito far more deference than any other Communist boss in the Balkans.

Tito sees himself as a world figure, a sort of Balkan Nehru, to be courted and listened to respectfully by all the big powers.

>> Moscow is playing Tito's game, up to a point, but for its own reasons.

Immediate aim is to undermine any U.S. influence over Tito, substitute

(over)

Soviet influence. Moscow is well along in achieving this aim.

Another major goal is to disrupt the Yugoslav-Greek-Turkish defense pact, with its tie to NATO, the North Atlantic Treaty Organization. This Moscow goal is within sight. Tito, having signed the Balkan pact last year, now says there is really no need for it, that Soviet Russia isn't going to invade anybody. With Yugoslavia out, there's a wide gap in defense line between Greece and Italy.

Moscow's next move is apparently to use Tito as promoter of a so-called "neutral" belt in Eastern Europe, on Russia's western flank.

"Neutral" belt will presumably include all Soviet satellites, along with Yugoslavia. Removal of Soviet troops from Hungary and Rumania will give illusion of neutrality to these satellites. In addition, Austria, Sweden, Finland will be pressed to join. It will be Moscow's idea of security for Europe.

>> Moscow's main target, in all these maneuvers, is to destroy NATO by making it appear unnecessary. It will then be difficult for U.S. to stay on in Europe.

In a neutralized, relaxed Europe, U.S. bases will seem out of place.

>> Tito, once threat and liability to Moscow, is being turned into an asset.

Tito's risk, in his present mood of high confidence, is that his foot will slip. He might just end up as a satellite again, rather than as a partner.

Tito tends to overlook Yugoslavia's economic weakness, unsolved problems. These are invitations to Moscow to move in, this time for keeps.

U.S. is discovering it can't outbid Moscow in dealing with a Communist. But if U.S. wants to go on giving arms to Tito, it's all right with Moscow.

>> In the Soviet war of nerves being waged against Western Germany.....

Chancellor Adenauer's trip to Moscow will be exploited to the hilt.

Cordial reception, the caviar and vodka routine, is to be expected.

Soviet offers to establish diplomatic relations with West Germany, begin trade and cultural exchanges, are already being publicized by Moscow.

All these Soviet moves appear as a sharp break with the past, when Moscow regularly denounced Adenauer. So you'll hear talk of Soviet change of heart.

Actually, these moves are gestures which cost the Kremlin nothing, but which build up false hopes that Moscow is about to agree to unifying Germany.

A little later, perhaps when Big Four foreign ministers meet in October, Moscow will show it's not ready to unify Germany, and German hopes will droop.

Deal with Adenauer to unify Germany is not to be expected at Moscow.

The Kremlin prefers to wait until Adenauer is out of the way. Meanwhile, idea is to keep Germans on edge, to make them look only to Moscow for salvation.

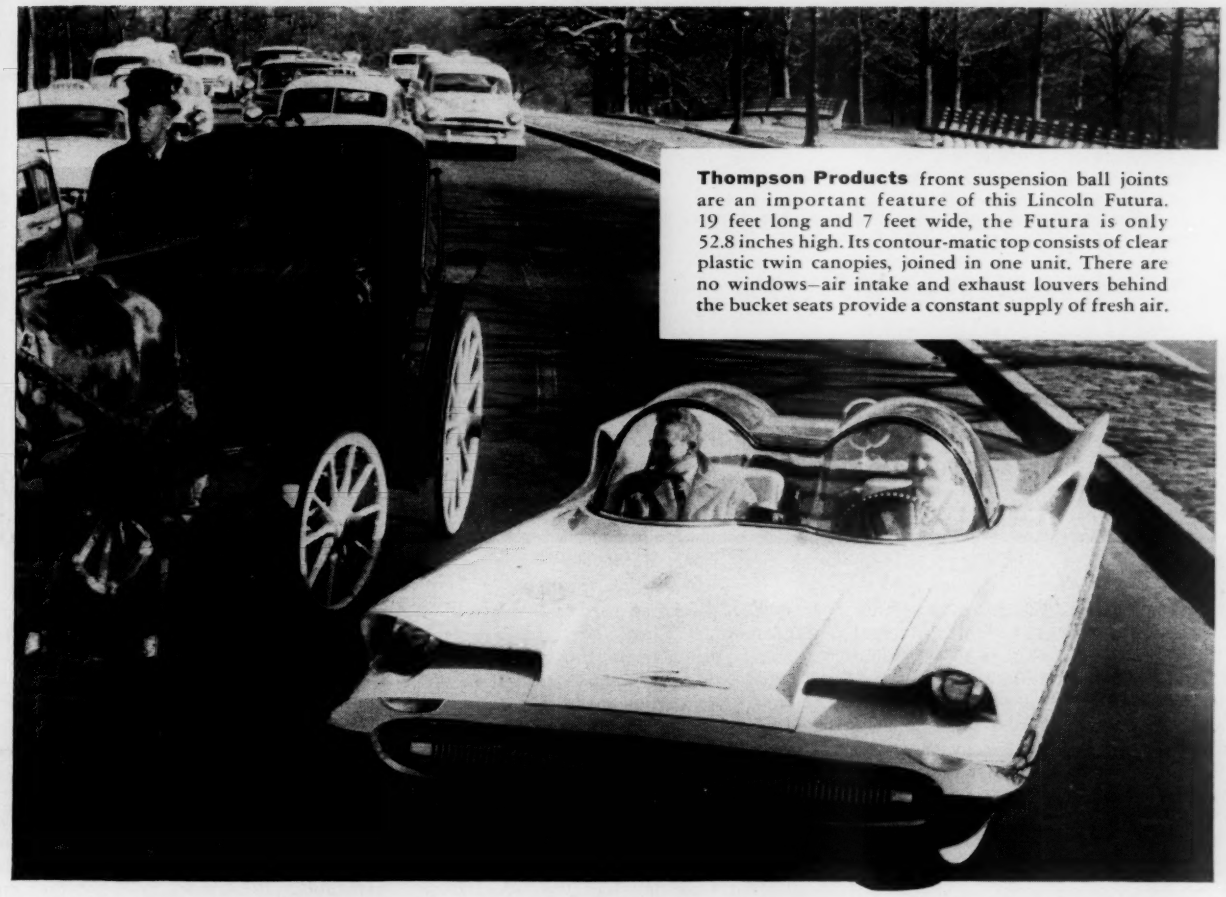
>> In Buenos Aires, there's a question about U.S. attitude toward President Perón. To give you an authoritative appraisal of the U.S. position.....

U.S. problem here is how to get along with a dictator. One way is to fight him. U.S. tried this with Perón, but Perón fought back, hurt U.S. with other Latin-American countries, made it rough for U.S. firms in Argentina.

Alternative policy is one of live and let live. U.S. has found that this policy works better, tends to keep Perón in line, is easier on U.S. business.

Official hope now is that Argentina will get back on even keel quickly.

U.S. is inclined to bet on Perón, in a way rather hopes he'll stay on top, mainly because it fears that, if he falls, what follows may be much worse.



Thompson Products front suspension ball joints are an important feature of this Lincoln Futura. 19 feet long and 7 feet wide, the Futura is only 52.8 inches high. Its contour-matic top consists of clear plastic twin canopies, joined in one unit. There are no windows—air intake and exhaust louvers behind the bucket seats provide a constant supply of fresh air.

You'll find Thompson Products ball joints TODAY on Lincoln's "CAR OF TOMORROW"!

- **Revolutionary styling and advanced mechanical design mark the $250,000 *"Futura"***
- **Ball joint front suspension permits "Dream Car" to hug road, steer easier and safer**

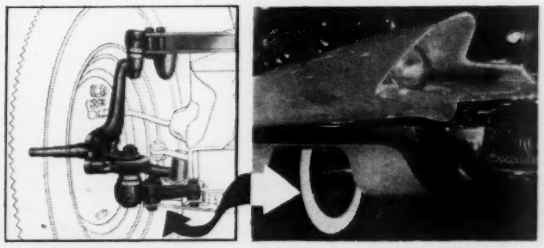
LINCOLN'S aptly-named "Futura" gives you an exciting peek into America's automotive future.

This quarter-million-dollar 330 HP beauty, a one-of-a-kind "laboratory on wheels", was launched to test radical drawing-board engineering theories *on the road* . . . also to test public reaction to its ultra-advanced styling.

But this astonishing new car is not built entirely of "laboratory" innovations. Incorporated in it are several advanced features that you may have now when you buy a new car. Among them are power-steering, power brakes and Thompson front suspension ball joints.

Three years ago the revolutionary Thompson-engineered front suspension ball joints made headlines as the first major improvement in front suspension in 20 years. It was found to help cars hug the road and make steering easier and safer. Already, several of America's top passenger cars have adopted it.

The development and mass production of this revolutionary product is a typical example of Thompson's side-by-side cooperation with the automotive industry. For more than 50 years Thompson has been a leading original equipment and replacement parts manufacturer for the automotive and aircraft industries. *Other* industries, too, have grown to *"count on Thompson"* ...agriculture, home appliances, metallurgy, electronics and many others. Thompson Products, Inc., General Offices, Cleveland 17, Ohio.



Thompson ball joints *(as shown at left)* permit *both* right-and-left steering on ball bearings and up-and-down motion on spherical bearing surfaces. This advanced front suspension principle not only makes steering safer and easier . . . it also allows valuable extra space for larger, more powerful engines; for more functional chassis design; for more dramatic body lines *(as shown at right* in the closeup of the Futura's front end.)

You can count on

Thompson Products

MANUFACTURERS OF AUTOMOTIVE, AIRCRAFT, INDUSTRIAL AND ELECTRONIC PRODUCTS. FACTORIES IN SIXTEEN CITIES.

1955

THE MAN ..Sherman Adams **THE NEWS** ..Ike's Silent Partner

When the President's Away— How the White House Runs

Ike is heading off on another long vacation. Once again, Mr. Adams, his chief of staff, takes charge of things in Washington. Despite critics, Mr. Adams's powers increase.

–USN&WR Photo

SHERMAN ADAMS, the terse and busy Assistant to the President and chief of the White House staff, is about to find his already considerable powers somewhat increased.

With President Eisenhower beginning a Colorado vacation next week, and with Congress in adjournment, Mr. Adams will be the operating head of the Government. He is the only man in the White House who is authorized, in the President's absence, to direct a Government agency to take action.

Whether the President is in or out of town, Mr. Adams, who has had his share of criticism from Congress and elsewhere, pretty much runs things for the President. He operates through a staff that, with a clear chain of command, has a finger on all Government functions.

Wherever Mr. Eisenhower may be, the voluminous work of the White House must go on. Problems must be attended to as they arise, speeches and statements written, documents signed, mail answered, critics mollified if possible and important minute-to-minute decisions made.

All this falls to Mr. Adams and a staff which he, himself, largely organized and molded. Those who have business with the White House say that in recent months the staff machinery has reached a peak of efficiency. Staff members feel that things are running more smoothly than ever.

Those close to the situation say that this orderliness is one reason for President Eisenhower's increasing ease and confidence in his job. Mr. Adams and the staff make many decisions for him, save his time, shield him from lesser matters, leave him free to devote himself to the important issues.

Some critics say the President is isolated from too many issues. It is Mr. Adams who decides what shall go to him and what shall not. But, in any event, through a staff system modeled on military lines, Mr. Eisenhower has reached, many think, a goal unattained by previous Presidents.

The old way. In the pre-Eisenhower-Adams era:

Calvin Coolidge had two secretaries, two dozen clerks. Herbert Hoover added one secretary and there were about 40 clerks. After several years in office, with Government growing and the White House involved in more and more matters, Franklin D. Roosevelt got congressional permission to install six Administrative Assistants, men "with a passion for anonymity."

President Truman added a new office, "The Assistant to the President," the post Mr. Adams holds, and a group of special assistants. President Eisenhower kept nearly all of these offices, and added to them.

–United Press

IKE AND ADAMS RELAX ON THE LINKS
At the White House: hard work and loyalty

The new system. Mr. Eisenhower has the largest staff of any U. S. President. He began with 34 top advisers, now has 44. There are special consultants on subjects ranging from atomic energy to the Civil Service. Usually these are officials of one agency or another. Some 30 actually make the White House wheels go around, backed by 260 clerks, stenographers and the like. The annual office-staff payroll is $1,714,000.

Each man has his special function—press relations, Congress, appointments, speech writing, letter writing, liaison with the departments and agencies, special aspects of foreign relations, disarmament. A staff secretariat assigns problems, issues requests for action; combs out questions of overlapping jurisdictions, and not infrequently settles questions itself.

Mr. Eisenhower has delegated his authority liberally. The system apparently works. One staff member says that this is proved by "looking at the dates that are stamped on the documents as they

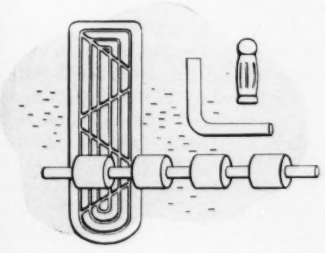
(Continued on page 48)

The rubber plant that never stops growing

Of course, we're talking about growth that is measured in terms of tremendous productive capacity and versatility—the continuous growth of The Ohio Rubber Company Division of Eagle-Picher.

Today, The Ohio Rubber Company supplies thousands of molded, extruded rubber and rubber-to-metal products to all types of industries, including leading manufacturers of automobiles, home appliances, business machines, toys, farm and industrial equipment. These manufacturers know they can depend on The Ohio Rubber Company for accuracy, for broadly diversified engineering and production services—and for enthusiastic assistance in laboratory and field research on special problems.

Good reasons why Eagle-Picher's Ohio Rubber Company Division continues to grow, and to play a major role in the progress of American industry.



Molded and extruded rubber products are among hundreds of Eagle-Picher products for homes and broadly diversified basic and growth industries.

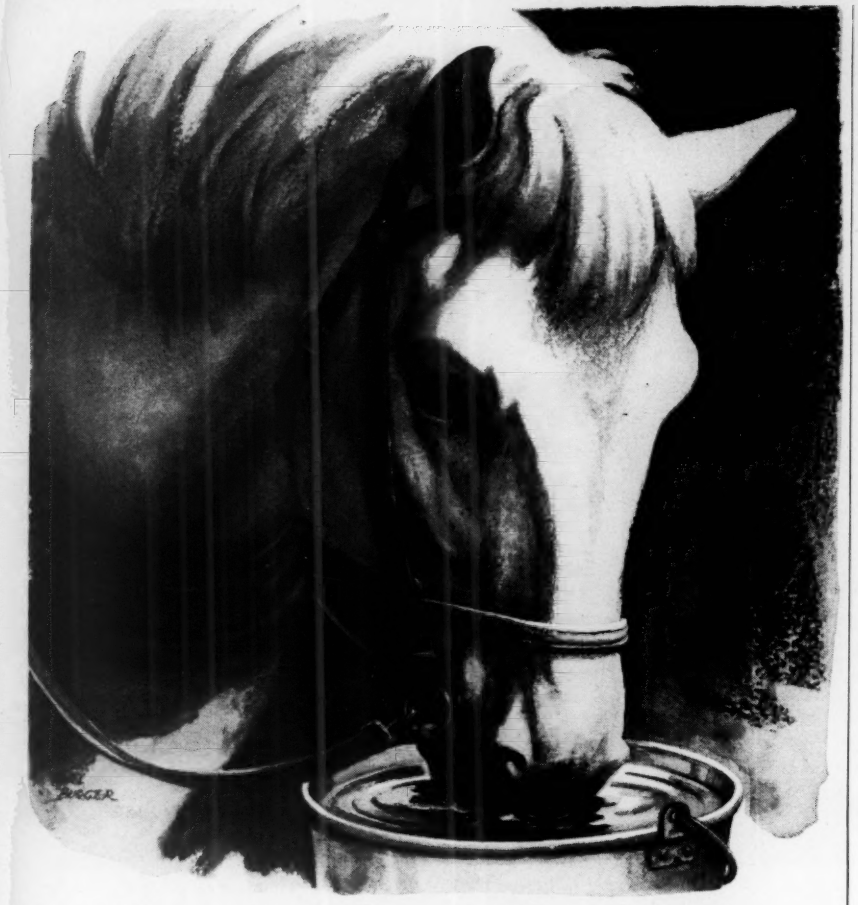
Divisions and principal products . . . **OHIO RUBBER COMPANY DIVISION**, molded and extruded rubber products—**FABRICON PRODUCTS DIVISION**, automotive products, plastics, waxed paper and cellophane food wrappers—**INSULATION DIVISION**, aluminum combination storm windows and doors, mineral wool insulations, diatomaceous earth products—**PIGMENT DIVISION**, lead and zinc pigments and oxides—**MINING & SMELTING DIVISION**, zinc, lead, germanium, cadmium. *We welcome opportunities to share our research, production and application experience. Just drop us a line.*

Since 1843

EAGLE EP PICHER

EAGLE-PICHER

The Eagle-Picher Company • General Offices: Cincinnati 1, Ohio



let's use some horse sense about water...

Once water was so plentiful we took its supply for granted. Today, we can't.

We Americans are consuming . . . and wasting . . . water at an alarming rate. Each of our 100 million people (served by public water supply systems) uses over 100 gallons daily. Industry, agriculture "drink" billions more gallons. Yet rainfall remains the same.

Water supply poses a problem every American must face.

For *your* part, use water wisely. Above all, support your forward-looking water officials. Encourage them to plan and build the new reservoirs and water facilities that will assure you, your family, and your business, an adequate supply for many years to come.

Man's most dependable carrier of water . . . Cast Iron Pipe

This cast iron water main laid in Lancaster, Pa. in 1835 still serves. Today, Modernized Cast Iron Pipe centrifugally cast is even tougher, stronger. Cast iron's proved record of long, trouble-free life saves your tax dollars. Cast Iron Pipe Research Association, Thos. F. Wolfe, Managing Director, 122 So. Michigan Ave., Chicago 3, Ill.

WATER, your priceless heritage . . . use it . . . enjoy it . . . protect it with

CAST IRON PIPE CAST IRON

Adams has been in the Ike camp since 1952 . . .

are received and comparing them with the effective dates of action on them."

When the President is in Denver, the staff is divided. Most members stay in Washington, but some may move back and forth. A few go to Denver to handle appointments, help with speeches, make announcements to the press. Mail is screened in Washington. Some of it goes on to Denver, often is returned to the White House for staff work before being answered.

Chief of staff. Presiding over the whole is Mr. Adams, 56, wiry and incisive, a man with no time for chitchat or small talk. He has been at the President's side since his nomination at Chicago in 1952. He is loyal and shrewd, enjoys Mr. Eisenhower's complete confidence.

Vermont-born and educated at Dartmouth, Mr. Adams eventually settled into the lumber business in New Hampshire. He was a member of the State Legislature and Speaker of the House, served one term in the National House of Representatives. He ran for Governor in 1946 and lost, ran again and won in 1948.

As Governor of New Hampshire, Mr. Adams was highly influential in getting the Eisenhower boom started in 1952. The first preference primary was in that State. General Eisenhower was in Paris. Senator Robert A. Taft was campaigning in the State. Governor Adams worked hard for Mr. Eisenhower, who won very comfortably.

The two met at the Chicago Convention, where Governor Adams was floor manager for the Eisenhower campaign. Mr. Eisenhower was impressed by the small, intense New Englander. Mr. Adams was at the General's elbow throughout the campaign, was consulted at every important turn, and it has been the same ever since.

Mr. Adams is one of the few men who always have access to the President. He is in and out of the President's office a dozen times a day. He makes it his business to know the habits, moods and opinions of the Chief Executive intimately. When he makes a decision without consulting the President he feels that he is on firm ground.

In return, Mr. Eisenhower likes Mr. Adam's loyalty, his brevity, his attention to important details, his ability to cut through red tape and keep White House business moving. "And," a White House insider says, "Ike likes his ability to follow a middle course. The President knows Sherm will never swing too far to the right or too far to the left."

. . . Some Republicans bitter on patronage, but—

Mr. Adams's day starts early and runs into the evening. There is a daily staff conference. He attends Cabinet meetings and sessions of the National Security Council, is always present when the President is briefed on any subject. He and his personal staff of nine handle some 300 telephone calls and a like number of letters daily. The mail usually is meant for the President's eyes, but Mr. Adams decides what to bring to Mr. Eisenhower's attention.

Critics. Throughout the Eisenhower Administration, Mr. Adams has been a target of criticism. Just now, some Democrats are assailing him for a telephone call that halted a Securities and Exchange Commission hearing on Dixon-Yates financing, just before an important vote in Congress.

Some congressional Republicans seeking favors have termed him waspish and aloof. They have complained that he has kept them waiting, sometimes for hours. In particular they have been, and continue to be, bitter about the amount of patronage that has gone to them, about Mr. Adams's disregard of their patronage suggestions.

Some of this discontent has been assuaged in recent months, however, by a more liberal White House policy, instituted by Mr. Adams, on the approval of small bills of local importance—for dams, airports, roads, sale of federal property—that mean so much when a Congressman is seeking votes.

Mr. Eisenhower is unmoved by the criticism of Mr. Adams. The President feels that his chief of staff is the uncomplaining target of criticisms that really are intended for him. Mr. Adams is believed secure in his job.

When Ike's away. White House aides expect the President to be in Colorado six weeks, but it may be longer. Last year, he stretched his vacation there to two months. For a few weeks, while the President is gone, Mr. Adams will be on vacation himself.

In Mr. Adams's absence, the Deputy Assistant to the President, Wilton B. Persons, will step into his job. General Persons, an old Army associate of the President, normally is in charge of liaison with Congress.

But, for the most part, regardless of criticisms, it will be Mr. Adams and his staff who will be running the Washington show.

In any event, as the man who usually sees the President last before an important decision is made, Mr. Adams will continue to be a man whose power and importance are difficult to overestimate.

Rockwell Report

by W. F. ROCKWELL, JR.
President
Rockwell Manufacturing Company

SOMEONE RECENTLY POINTED OUT that we hadn't bought a company in over a year, and asked (in a critical tone) if that indicated we were standing still, had stopped being "dynamic."

We tried to clarify two points for him.

First, we have never bought a company merely to appear "dynamic." We will buy our next company the day we find one that can be operated profitably, that can contribute to our sound growth and diversification, that can be consolidated reasonably well, and that has a price tag fair to both the seller and the buyer. There is no purpose in assembling a combination of heterogeneous companies which cannot, individually or collectively, stand the test of time.

Second, we emphasized that our growth has never depended solely on acquiring companies. To us, our internal research and development programs are just as "dynamic" as our acquisitions.

In addition to our central research laboratory at Pittsburgh, we have formal departments at eight plant locations. Our laboratory at East Chicago, for example, has gained a national reputation as the best equipped metallurgical lab in the steel valve industry. Our new meter and valve testing station outside Pittsburgh is the largest and most complete "working" laboratory of its kind in the world, and should allow us to make substantial contributions to the knowledge of measurement and control.

All together, about 235 of our employees are directly involved in research and development. During the past five years, more than 60% of the products we've introduced have come out of our own laboratories. In 1954, for instance, we announced five new designs in the Delta Power Tool Division alone.

Our strength is built on serving basic and growth industries with essential products. Those products come out of our own research quite as much as they do from acquisition. The central requirement is that they contribute to reaching our long range objective: The greatest possible security for profits, and therefore the greatest possible security for the jobs of our people and the dividends of our stockholders.

* * *

Since most job training must be done on the job or at the plant site, last year we set up a training program on "How to Train." The program was aimed at developing—among plant executives in each division, and regional and product sales managers—a better understanding of how to teach through proved teaching principles and modern visual aids. Its greatest value, of course, is for the newer men at the plant and regional executive level, but even the veterans were surprised at how much more effective the program made the training phase of their jobs.

* * *

We have found it helpful to have purchasing agents at the plant level provide monthly figures on the number and value of purchase orders issued, value of incoming materials received, total purchasing commitments outstanding, plant inventory in dollars, and cancellations in dollars. This permits the staff purchasing department to correlate divisional purchasing activities, and to advise on trends.

* * *

Gas utilities in this country expect to add about 1,200,000 homes for house-heating in each of the next three years, in addition to the 25,806,200 residences now using gas. To meet this increased need for gas meters and regulators, our meter and valve division has built additional production facilities in two of its plants. We have also established a new laboratory for regulator development and testing.

One of a series of informal reports on the operations and growth of the
ROCKWELL MANUFACTURING COMPANY
PITTSBURGH 8, PA.
for its customers, suppliers, employees, stockholders, and other friends

Special Report

(This article represents the result of an extensive research on a problem of outstanding importance.)

IS THIS A GOOD TIME TO BUY A CAR?

Planning to buy a car? This is what you will find—

Prices are being cut more, through larger discounts. Supply of cars is huge.

Manufacturers wish they could raise prices in 1956, but don't know if they will be able to. Model changes are to be less striking.

Reported from
WASHINGTON, NEW YORK,
DETROIT and SAN FRANCISCO

The automobile industry is in one of the stiffest tests of its spectacular, but often troubled, career.

How it meets the test will affect all those planning to buy cars, the dealers who sell them, many others in business.

Repercussions already are being felt in many ways. Prices of new cars are being cut in the face of rising costs. Some dealers are being forced out of business in the midst of the biggest market the industry has ever known. Production of most makes of cars is being trimmed, and yet the manufacturers go right on ordering huge quantities of steel, showing high hopes for 1956.

The chart on this page sums up the auto problem: a lot of cars to sell.

In the first half of this year, dealers sold well over 3.6 million new cars, more than in any previous six-month period. But, meanwhile, the manufacturers were setting an even higher record for production by making nearly 4.2 million. Exports took about 147,000 of these.

Stocks of new cars piled up to a record number of 730,000 in May, dipped to about 675,000, on July 1.

Thus, on the eve of the slack selling season, dealers had—and still have—an unusually large stock of cars to sell.

That isn't all. Production, while past its peak, remains high. The factories rolled out 663,000 cars in July and are expected to make at least 575,000 in August. For the second half of the year, output seems likely to be about 2.8 million, unless plans change.

Add that to the 675,000 on hand at the start of the period, and you have

In the second half of this year—

Dealers started out with this many unsold new cars	675,000
They are expected to get from manufacturers	2,822,000
Thus, they will have available	3,497,000
BUT:	
Dealers hope to begin 1956 with no more than	362,000
SO:	
They must sell, in second half of 1955	3,135,000

AT THAT LEVEL, SALES WILL BE—

from the second half of 1954

from the first half of 1955

Source: Inventory figure, Ward's Automotive Reports; other figures, estimates by USN&WR Economic Unit
© 1955, By U. S. News Pub. Corp.

nearly 3.5 million cars for sale. This would be a very large number, from a historical standpoint, even if it were the better half of the year, instead of the slower half.

The dealers' goal is to sell all but about 362,000 of these by December 31, leaving a carry-over close to the number on hand on Dec. 31, 1954.

Bargains today. Most dealers feel they are going to have to push hard to sell so many cars, but also feel they can do it. They note that the goal can be achieved by selling about 13 per cent fewer cars than in the first half of this year; that means they can take a more-than-seasonal decline.

On the other hand, sales still would have to hold about 19 per cent higher than in the second half of 1954. A new survey of consumers by the Survey Research Center of the University of Michigan indicates that the number of prospective buyers in June this year is about the same as in June, 1954, not larger.

The dealers are taking no chances. A Mercury dealer in Portland, Oreg., tendered every buyer in the last 11 days of July a free trip to Hawaii. That's in addition to a price discount. One customer got, in addition to the trip, an allowance of $1,350 on a 1951 club coupé with a wholesale used-car value of $750.

Discounts widespread. A Ford dealer in Los Angeles offers a new car equipped with radio, heater, white-sidewall tires and undercoating—plus a 50,000-mile guarantee—at the price regularly listed for the car without extras.

A Pontiac outlet in San Francisco makes a $500 discount in cash or trade-in on every new car, it claims.

Credit terms are so easy the Government is trying to get banks and finance companies to show more caution. Quite a few dealers say they can sell on the basis of one third down and 42 months to pay the balance.

Some dealers even advertise 48-month loans, but few buyers get them.

Now, if the Government has its way, cars are to be a little harder to buy and sell on credit.

A special problem of the new-car dealers is competition from almost-new cars being sold at extra-large discounts. Some are represented by merchants as "demonstrators" or "company-official cars."

Others are sold to independent used-car dealers in so-called "bootleg" deals.

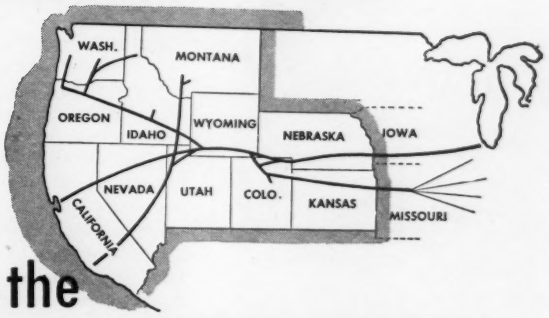
These cars are in addition to the 675,000-car inventory. By one industry estimate, there may be as many as 173,000 cars being offered as "new-used."

Higher prices coming? Because of those inducements, consumers are finding that today is about as good a time to buy as they are likely to see in the near future, at least from the standpoint of price. Cost of a car, allowing for dis-

(Continued on page 52)

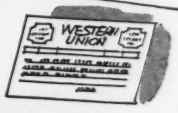
for information about favorable

INDUSTRIAL SITES



in the

UNION PACIFIC WEST

get in touch with your nearest "U.P." representative or write . . or wire 

UNION PACIFIC RAILROAD

Industrial Development Dept.

OMAHA 2, NEBR.

In the eleven-state territory which it serves, Union Pacific provides the finest in rail service. In many cases, industrial trackage can be built where requested.

UNION PACIFIC RAILROAD

The Mother Lion and the Braggarts

The animals were arguing about who had the biggest litters. Some talked big about their twins or triplets, some bragged of a dozen.

Finally, they asked the lioness, who rather quietly replied, "Only one—but that one is a lion."

That's where Aesop stood a long time ago on the question of quality versus quantity. That's where Merrill Lynch still stands today.

We'd much rather see an investor pick a few really fine stocks for his purposes than buy a little of everything in sight—the bad along with the good.

Telling the two apart, of course, is not always easy. But when you have all the facts, it's not nearly so hard.

If you're not sure that each stock you own is the best you can buy, you might like to have our Research Department take a look at your list, send you a qualitative report on your present portfolio.

There's no charge, no obligation. Simply mail your letter to me.

WALTER A. SCHOLL
Department SA-44

MERRILL LYNCH, PIERCE, FENNER & BEANE
70 Pine Street, New York 5, N. Y.
Offices in 107 Cities

. . . Auto makers wonder if it's safe to boost prices

counts, is not likely to get lower and might, in some lines, go up a bit. You see why when you look at the auto problem from the view of the dealer and producer.

For the dealer, all is not rosy. His margins are being cut thin. A Senate subcommittee investigating this problem says the average profit shrank from $6.30 per $100 of sales in 1950 to 60 cents in 1954.

At least one major company would like to raise prices in 1956. Costs are going up; just recently, wages and the prices of steel, cooper, aluminum and tires increased.

However, industry men wonder if a price increase could be passed on to the consumer.

Several manufacturers now are giving their dealers bonuses. Through this device they help pay for the discounts the dealer gives the ultimate buyers of cars.

Ford, for instance, gives a dealer who sells 90 per cent or more of a given quota a bonus of $100 per car.

Chrysler has a somewhat similar plan. And American Motors has a profit-sharing setup.

Right now, auto makers are slowing output, with exception of General Motors, which turned out 20 per cent more cars in July than in June and expects to continue at a high rate through August.

Ford cut back 8 per cent in July; Chrysler, 21.5 per cent. Production of 1955 models of some makes—Chrysler, DeSoto and Lincoln—has been discontinued.

The new models. Thus, attention is shifting in many factories to the new 1956 models, which will be going into production in September and October and will be unveiled in October and November. For the industry as a whole, this change-over period is expected to be longer than usual.

The total number of cars produced in the second half of the year is likely to be about 31 per cent less than in the first half.

This switch to new models poses an unusually tricky problem for the industry, because of the big surplus of cars on the market. Manufacturers feel they can't promise too much for 1956 without making it hard to dispose of the remaining 1955s.

Most of the talk in the industry is about safety features to be incorporated into the 1956s, about increases in horsepower, and generally "few major changes" in design.

Among the exceptions is Lincoln's new, luxury-class "Continental," to be brought out in October. Also, Studebaker is laying out a new body design, and American Motors plans to make its "Rambler" a little larger.

Undoubtedly, the other alterations will be made to sound impressive when presented to the public in the autumn.

Sales patterns also are undergoing a change, as the public shows an appetite for the larger, more powerful, more expensive lines within each make. Ford is making preparations to turn out more V-8 engines, fewer sixes.

Trends like these are forcing the companies to modify their plants, so that there seems to be no end to heavy investments.

Auto fight goes on. Meanwhile, the boom in sales and output this year has brought substantial gains to practically all producers, yet has not much reduced the dominance of the big companies.

Chrysler Corporation alone can claim a substantially larger share of the manufacturing business: 18 per cent in the first seven months of this year, compared with 13 per cent in the same period of 1954. In recent months, however, the Chrysler share has been slipping.

Ford Motor Company this year has 27 per cent, down from 31 per cent in the first 7 months of 1954. General Motors is 50 per cent, compared with 52.

This leaves the Big Three with a combined figure of 95 per cent, compared with about 96 a year ago.

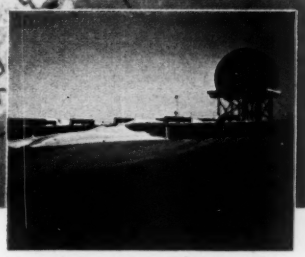
So the competitive race continues amidst all the other troubles of the industry: its mounting costs, heavy investment expenses, thin dealer margins, price weakness in the consumer market, a heavy surplus of cars, and the constant pressure of style and technological change.

Autos in 1956—How Many?

The magazine "Iron Age," publication devoted to the steel industry, reports:

"Forecasts from Detroit are that the market for new cars will equal or exceed 1955 sales. Unofficial estimates are that 1956 will be another 8-million-car year. Some steel sources who keep close tab on the automotive outlook are talking about a 10-million-car year in the next several years. Auto producers are in a tough competitive race for the consumer's dollar and can be expected to go all out to stimulate sales."

Artist's sketch of early warning line plan.



DEW Line radar station in the Arctic.

NEW RADAR SKY-WATCH TO GUARD ARCTIC FRONTIER

If enemy planes ever attack from over the North Polar regions, every minute of advance warning of their coming will be precious—for minutes may mean the difference between a successful defense or a crippled America.

So today, across the northern rim of the continent a line of unique radar stations is being built in the icy Arctic wastelands. This is the Distant Early Warning Line... DEW Line, for short.

DEW Line radars will scan the skies constantly...spot any invaders and instantly flash a warning to defense command centers in the United States and Canada. This outermost Arctic sentry will give us earlier warning...will work with the Mid-Canada and Pine Tree radar lines that the U.S. and Canadian governments are providing farther south. All three will function in one vast protective net.

Basically, an early warning radar line is a communications system. So Western Electric, which produces and installs equipment for the Bell Telephone System, was called upon in 1952 by the U.S. Department of Defense to build on the northern shores of Alaska an experimental early warning line based upon development work done at Lincoln Laboratories, at M.I.T.

We started at once to organize a team for the task. We selected communications specialists from our own ranks; from 17 Bell Telephone Companies, Bell Telephone Laboratories, A. T. & T.'s Long Lines Department and our Canadian affiliate, Northern Electric Company.

Joining forces in much the same way we do to provide Bell telephone service, we pooled our experience and went to work ... research scientists, procurement and transportation specialists, construction engineers, microwave technicians, transmission experts, skilled operators of electronic equipment...all with a single mission: to build a first line of defense for America.

Hundreds of other firms were called in to help. Special buildings and construction techniques were invented to meet the severe Arctic weather. Electronic equipment was specially made or converted to cope with magnetic storms. There were major transportation problems to be solved, for tractors, buildings, machinery, millions of gallons of fuel ... thousands of tons of material ... all had to be delivered to faraway barren sites. Yet, the job was done on time.

The test installations proved successful—and the U.S. and Canadian governments promptly decided to extend the DEW Line across the Arctic. Western Electric again was called upon—was asked by the U.S. Air Force to undertake, as prime contractor, the job of building the thousands of miles of radar line with responsibility for all phases of it: development, design, engineering, procurement, transportation, construction, installation, testing and training of operating personnel.

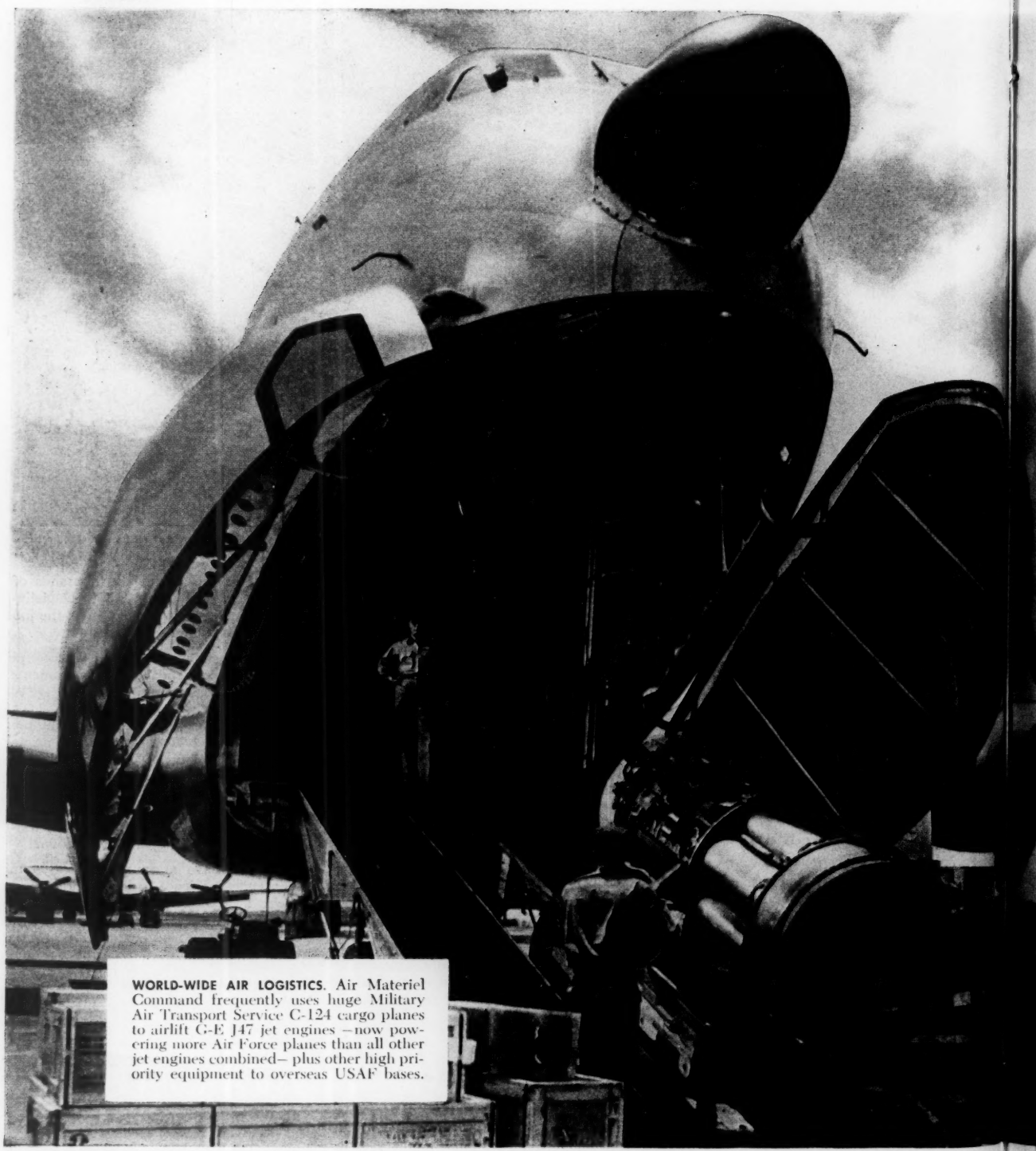
Again we have assembled Bell System men and experience to get the job done. We're at it now. Already thousands of tons of heavy equipment have been delivered by air, tractor-train and ship to Arctic sites—much of it by the Air Force and the Navy. Construction is going ahead rapidly before the Arctic winter sets in. Working together, we are pressing forward on the project at full speed.

Western Electric

MANUFACTURING AND SUPPLY UNIT OF THE BELL SYSTEM

DEDICATED TO AMERICA'S DEFENSE

HOW USAF JETS GET SUPPORT



WORLD-WIDE AIR LOGISTICS. Air Materiel Command frequently uses huge Military Air Transport Service C-124 cargo planes to airlift G-E J47 jet engines—now powering more Air Force planes than all other jet engines combined– plus other high priority equipment to overseas USAF bases.

RTAROUND THE WORLD

From Texas to Tokyo, the Air Materiel Command keeps Air Force units combat-ready, supplying everything from helmets to G-E jet engines

All around the world today giant C-124 cargo planes are opening their huge jaws, delivering to our Air Force men some of the 1,250,000 different items needed for the job of protecting us against attack.

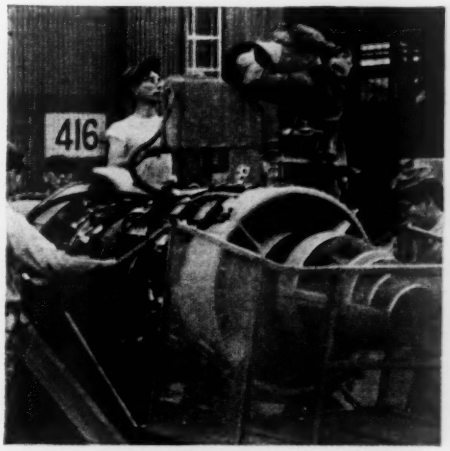
The Air Materiel Command, world's largest business, *buys* all this equipment, *supplies* it wherever needed, and, in many cases, *services* the equipment, keeping it in top condition at all times. In performing this massive job, AMC has the close cooperation of American industry.

Typical of AMC-industry teamwork is the job performed by General Electric in supplying to the Air Force more than 30,000 G-E jet engines to date. Today, 276 General Electric specialists are stationed in 24 countries to help maintain and service G-E engines—used in such key planes as North American F-86 Sabre Jets and Boeing B-47 bombers.

G-E jet engines actually cost taxpayers less as the result of a joint AMC-General Electric cost reduction program. In 1953, for example, AMC saved $100 million when the increased durability of G-E engines allowed a reduction in the total required to meet Air Force needs. From 1950-53, G.E.'s improved jet production methods saved another $50 million.

In planning ahead, G.E. and the Air Force work together to develop even more powerful jet engines for tomorrow's military aircraft. It is teamwork like this that is keeping America strong. Should an aggressor decide to test U. S. strength, AMC-industry cooperation will be one of the big factors that will help defeat him. 232-12

CHAUMONT, FRANCE. F-86 Sabre Jets flash over countryside. Equipped through the Air Materiel Command, F-86's are top NATO combat aircraft.

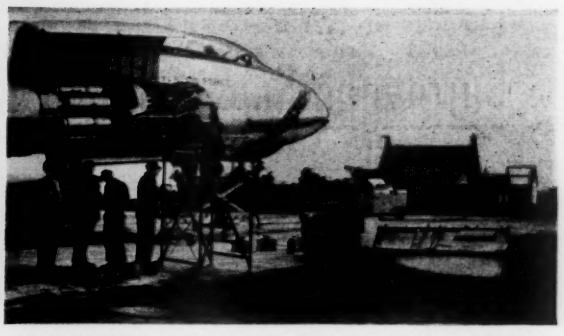


TACHIKAWA, NEAR TOKYO. Japanese maintenance crews service General Electric jet engine at an air depot. Screen protects finely-adjusted engine parts.

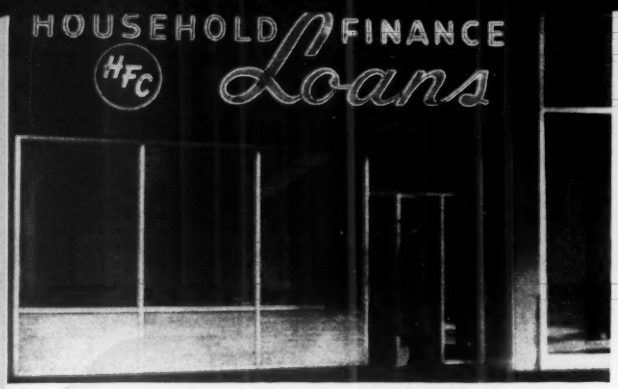
Progress Is Our Most Important Product

GENERAL ELECTRIC

DETROIT, MICHIGAN. G.E.-powered F-86D interceptors roll from hangars during practice air raid. AMC supplies all Air Defense Command squadrons inside the United States.



GLOUCESTERSHIRE, ENGLAND. Strategic Air Command B-47's bolster U. S. Air power in Europe. AMC overhaul and maintenance procedures keep big bombers in constant readiness.



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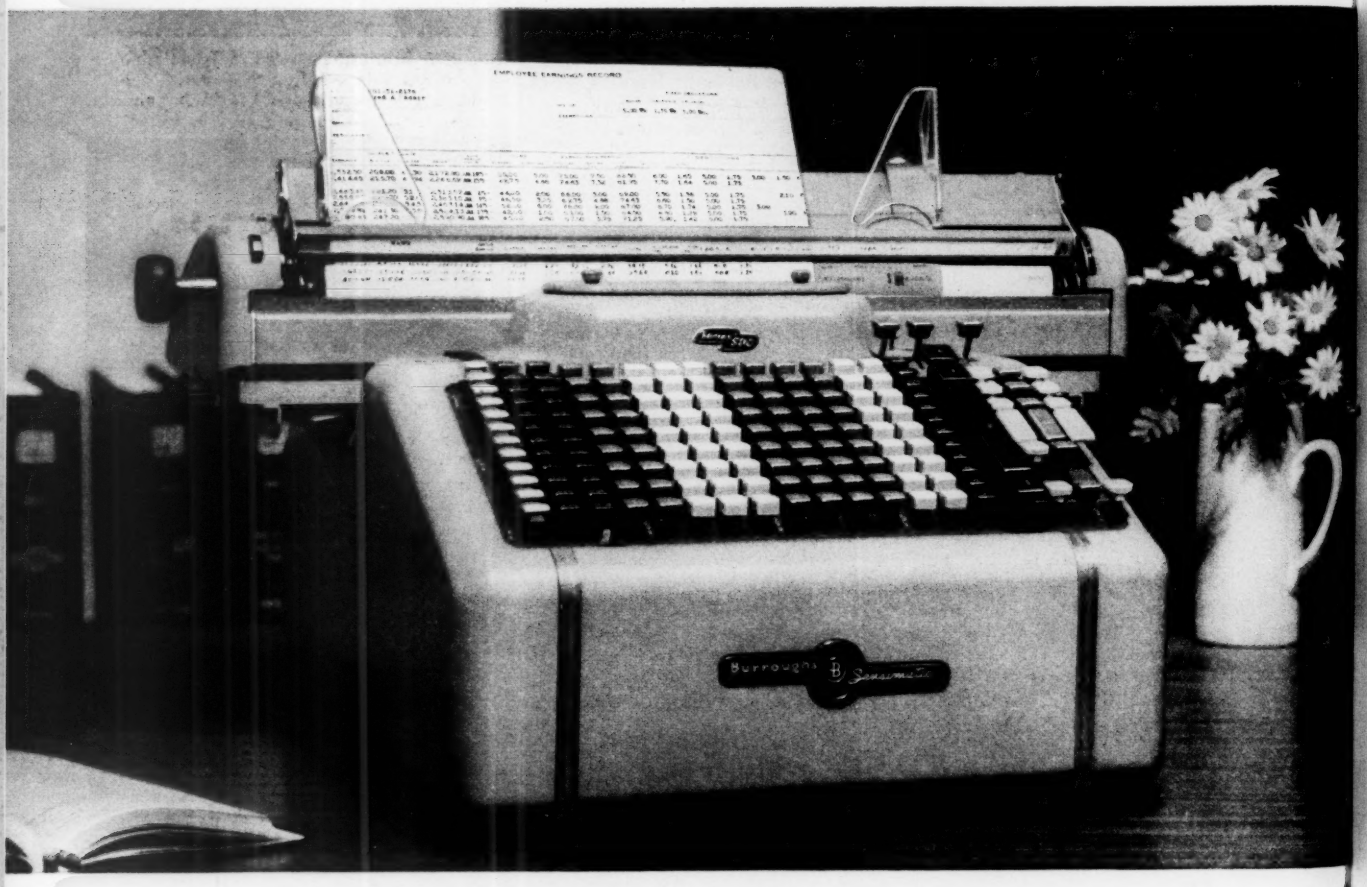

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We've Been Asked:

ABOUT SERVICE FOR VETERANS

- Many veterans who have returned to civilian life still are liable for further duty under the new Reserve program now being put into operation.
- Some questions about the status of both present and future veterans are answered by the Reserve Act of 1955.

Are veterans affected by new rules governing the Reserves?

Yes, they are. It is made clear by Congress that any man who is out of the armed services—or who entered service before the date of the new Reserve Act—does not have to take part in further training unless he wants to.

Does that mean that these veterans will not have to drill or attend summer maneuvers if they are not in an active Reserve unit?

Yes—that is spelled out in the new Reserve legislation. These officers and enlisted men are not required to attend drills, unless they volunteer for active training with a Reserve unit or the National Guard. This removes a threat that hung over many veterans under older law—the possibility that they could be punished for not attending weekly drills. In practice, however, such penalties had not been imposed.

But can a veteran be called back into active service?

That's possible for men who entered active service after June 19, 1951. Veterans who started service after that date and before the effective date of the new Reserve Act have an eight-year military obligation. Those carried on the rolls as Ready Reservists can be called back to active duty by the President in time of national emergency. Those in the Standby Reserve, however, can be recalled only by action of Congress.

How can a man tell if he is a Ready or Standby Reservist?

Men in the Standby Reserve at this time are generally World War II veterans who took Reserve training and later requested transfer to Standby, and some veterans of Korea who have been transferred to Standby. Veterans who entered service after June 19, 1951, are technically members of the Ready Reserve. They stay in the Ready Reserve until the eighth anniversary of their entry into the armed forces—unless they participate in Ready Reserve training for a time : :d thereby win earlier transfer to Standby status.

What inducement is offered for active participation in the Ready Reserve?

One inducement is to cut down the time for which a veteran is a member of the Ready Reserve and is thus among those likely to be called up first in an emergency. For example, a veteran who has recently been released after two years in the Army can join a drilling Reserve unit for three years. After that he can get shifted to the Standby Reserve for three more years, with little prospect of being called back to active duty unless there is a war. If, however, he does not do this, he usually will be carried on the Pentagon roster as a Ready Reservist for six years, subject to recall in time of emergency until 1961.

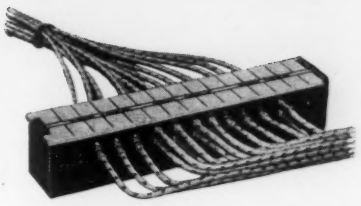
What about men still in service?

A man in service at the time of the signing of the new Reserve Act by the President is offered a chance to reduce his time in the Ready Reserve. After release from active duty, he can sign up for one year of Ready Reserve training with weekly drills, and then go immediately into the Standby Reserve. If he does not do that, this future veteran would be in a Ready Reservist status for up to six years. But he will not have to undergo active Reserve training.

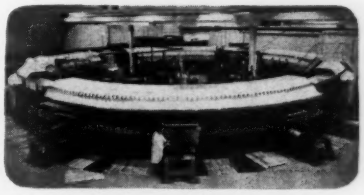
Men in service at the time of signing of the new Act would be given another opportunity under a program authorized by Congress. After 12 months' active service, and if they could be spared, they could return home and participate in drills of a Ready Reserve organization for three years—or until total time on active duty and in the Ready Reserve equaled four years.

What about future veterans?

Men beginning active service after signing of the Reserve Act of 1955 have a total obligation of six years, instead of eight as in the past. Thus, a man being drafted now will usually serve two years on active duty, then put in three years training in the Ready Reserve and stay one year in the Standby. Under the new act, this man faces penalties if he refuses to take part in a Ready Reserve program.



It takes lots of
GOOD CONNECTIONS



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Interview with DONALD A. QUARLES
Head of Research for Armed Forces

STORY OF THE "PUSH BUTTONS": LATEST ON NEW WEAPONS OF WAR

How near is real "push button" warfare now? Is the earth satellite to be just one more step toward the day of super-superweapons?

Will the intercontinental guided missile, with a range of 5,000 miles, come next? Are weapons of World War II already out of date?

To get authoritative answers, *U. S. News & World Report* invited to its conference room Donald A. Quarles, Assistant Secretary of Defense for Research and Development.

Mr. Quarles heads the vast research activities of the armed forces. These activities involve expenditure of nearly 2 billion dollars a year and include more than 7,000 current new-weapons projects.

Before assuming his present position in September, 1953, Mr. Quarles had worked all his life in the field of science.

Q Is it your job to develop push-button warfare, Mr. Quarles?

A Only in the most general sense, if you would let me define push-button warfare. Accepting what one might call the "Buck Rogers" definition of it, then that is not a good way to characterize it. It is true that science and technology are moving forward very rapidly and that the technical part of warfare is changing and progressing so fast that many things can be accomplished effectively today only by machines that act faster and worry less about such things as altitudes and accelerations than human beings would have to worry.

So, we are by many factors forced toward automatic devices for doing things that previously were left to human beings to do in their own normal timing. In that sense, we are moving toward more automatic weapons, high-performance weapons, that will do things and stand things that human beings inherently can't do or withstand.

Q What about these satellite platforms? To what extent, Mr. Quarles, is the Department of Defense interested in the President's plan to launch an earth satellite?

A The Defense Department is interested in all scientific progress, particularly in the field of earth sciences.

Q Will this particular satellite project have military importance?

A Only indirectly; this satellite does not have a military mission. It is to advance science, and scientists of 40 nations are participating in it.

Q What part will the Defense Department play in the project?

A It will provide the logistic support by making available the rockets, the control techniques and the launching facilities for the project. It is, in fact, the only agency in the U. S. that has such facilities available.

Q How about the satellite itself?

A The satellite itself and all of its characteristics including its orbit in space will be designed by the scientists, but within the capabilities that the Defense Department can furnish for launching.

Q What happens to the information that the satellite may relay back?

A It will be made freely available without security classification to scientists everywhere; however, it will be necessary for some of the equipment and technical details for launching the satellite to remain classified.

Q From your research would you say that within our lifetime interplanetary travel might become a reality?

A If by interplanetary travel you mean travel by human beings to one of the other planets, it looks to be entirely beyond the range of anything but fancy at the present time. If you mean travel outside of the atmosphere of our earth, that may be within the realm of physical possibilities. I don't myself expect to see human beings performing these antics, but I wouldn't be surprised to see objects performing them.

Q Then it is possible to conceive of an object sent to a certain area in space?

A It is possible to conceive of objects traveling in paths outside the atmosphere of the earth, yes, but as for their landing on a platform, I don't include that in my possibilities.

Q How high up is there atmosphere?

A This is a matter of definition. There is some trace of atmosphere up some hundreds of miles, although here we don't have too good information on the point. In a practical sense the atmosphere is so attenuated in the area above 100 miles that it doesn't exist for most practical purposes.

Q When an object gets up that high, does it gain in speed? There's less resistance, isn't there? What holds it up there?

A It doesn't gain in speed unless it is falling toward the earth. Neither does it lose speed, because there isn't any air there to slow it down. What holds it up there? The same thing holds it up there that holds the moon in its orbit around

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Guided Missiles: Planes That Go Where Bombers Can't . . . How Military Will Help on Space Satellite

the earth—that is, a balance between the gravitational pull of the earth on the moon and the centrifugal force of the moon moving in an elliptical course around the earth. It's the balance of the pulling in of gravity and the pulling out of centrifugal force that would hold a satellite in a stable course around the earth.

Q Is there any new family of weapons that we can look forward to, like death rays?

A I would say that, as a generality, you have to expect science and the ingenuity of man to come up with things that we don't now know about and don't now foresee. I wouldn't care to predict that it would be a death ray, but I would also not care to predict that there would be nothing new.

Q If a war were to come in the next few years, would the weapons be much different from those of the past war?

A Yes, they would be. Many things about warfare persist over the ages, a good many fundamentals of it, but the weaponry of the next war, if any, will be—I think all experts agree—very different from the things in the last war. And even in the last war, we saw the beginning of a real revolution in weaponry.

Q Can you say what types of things are changing?

A Well, let's first see what happened in World War II. The airplane, of course, came into its own. There was this technological race between the contestants in the war as to whose planes would go higher and faster and carry a bigger punch, and this meant that aviation, as we left World War II, was an entirely different thing than it was going into World War II.

The progress in aviation has been, if anything, more marked since the end of World War II than it was during the war, so that today a World War II vintage airplane would be hopelessly outclassed in the air in any field.

Of course, the atomic bomb came in at the end of World War II in what we might speak of as a primitive form and has been enormously refined and developed and exploited for a great variety of uses rather than for particular strategic-bombing use as it was then conceived. So that there's been an enormous change in our atomic weaponry.

Similarly, in electronics, the things that one saw the beginning of in World War II have been carried forward through exploitation and use way beyond anything then contemplated. In electronics we saw radar in advance form in World War II playing a very major role in the war. We saw electronic forms of fire control being associated with radar to produce automatic weapons of great effectiveness. All of these arts have been greatly extended in the postwar period. Many of them come together in our guided-missile program.

—USN&WR Photo

DONALD A. QUARLES

Q In the maneuvers in Germany there are supposed to have been only three weapons in use by the troops that were in use during the war, which means the ground methods are changing—

A Well, I think this is also true—perhaps not so spectacular, but nonetheless an important aspect of what has been happening. We have today some 7,000 or 8,000 different research and development projects in the military establishment, and these range across the whole field of weaponry and mean, of course, that there is scarcely a field that is untouched by new development.

Q From the rifle on up?

A From the rifle on up.

Q Will these new weapons result in a decrease in the requirements of manpower?

A They would result in a decrease in the requirements for manpower if your opposition didn't have new weapons, too. But, of course, that is a narrow way to look at the thing. If you assume that both are building up in their material and in their weaponry along parallel lines, then it isn't an absolute thing but a relative thing that you are dealing with, and in a relative sense you still have to be better than they are to win. That is, the combination of your weapons and men has to be better than their combination. Now, if your weapons are outstandingly better than their weapons, you can be better with fewer men. But this is a matter of degree.

Q Are these new weapons simple enough so that the average American will be able to manage them and also maintain them?

A Many of them are just as simple as their antecedents were. Of course, it's part of the charge to the development man in getting out a new weapon that he get out the simplest and most maintainable one he can to do the prescribed job, but we must recognize that, in spite of that, the trend here is toward more and more complicated technology on the battlefield.

Q So that you have to have a professional to service them—

A You've got to have more people with technical backgrounds, or at least technicians, in order to do the job effectively. And this, of course, is the reason for the great stress

(Continued on next page)

. . . "We are passing beyond the physical limitations of a man"

on the career incentive plan and the other things that the departments have been doing to try to increase the average length of service and average experience of their people in uniform.

Q Is the great advance in the future likely to be in guided missiles?

A Some of it is certainly likely to be there, not to the exclusion of manned aircraft to perform similar missions but for just the reasons that I mentioned earlier—that we are passing beyond the physical limitations of a man in performance requirements and one has to design a machine to meet them rather than trying to meet them with human beings.

JOBS FOR THE BOMBERS—

Q Does that mean, Mr. Quarles, that the bombing plane as we know it is likely to be obsolete in the next five to 10 years and be replaced by a missile of long range?

A I would say "No." I would say that the bombing plane as we know it today will probably continue to be the preferred way of doing the job. But, if the bombing plane as we know it today encounters defenses or obstacles that make it impractical to do the job that way, then we must have missiles that will go beyond the performance of that kind of weapon. I think that, within any future that I can foresee, these guided missiles will be auxiliary to, or supplementary to, rather than a replacement of, the present type of weaponry.

Q What is a guided missile, in simple terms?

A A guided missile is a combination of a warhead, a propulsion system for delivering the warhead to the desired spot, and a guidance system to define what spot is desired and then to navigate the missile to that spot by suitable control devices. This involves, then, a complicated combination of propulsion systems, aeronautical systems—to control the device that travels through space—and an electronic system for computing the course the device should follow and computing steering orders to get there.

Q And that is all done without a man?

A Without a man, except on the ground.

Q Does the man on the ground do the thinking, or do the machines do the thinking?

A The man on the ground makes certain command decisions that the machine executes. For example, once a particular approaching enemy plane is designated to the machine, then the machine is quite competent to perform the rest of the mission of intercepting it without further human assistance. That differs somewhat in different guided-missile systems, depending on the mission to perform, but generally speaking that is the philosophy of it.

Q The guidance goes on mechanically by the machine itself?

A That's right.

Q Can the plane be equipped with something that would prevent the homing device of the guided missile from performing?

A This brings up the whole business of measures and countermeasures, and the answer is that probably anything that we could devise would in some measure be subject to countermeasure by an enemy attacking against it—if he knew enough about the characteristics of the thing that we were using.

Obviously, this is a kind of chess game in which each makes the best move he can to injure the other and to escape the injury planned by the other for him. This is true of the design of our weapons in the first place. We make them as difficult to counter as possible. And it's true of our own defenses in the second place.

We're as smart as we can be in finding out what the enemy is going to do and finding out how to counter it. But there is, again, no absolute position here. You hope to be smart enough and far enough ahead and diverse enough in your arrangements so that he can't keep up with you.

Q Do these devices really twist and turn the way they appear to in some of the pictures?

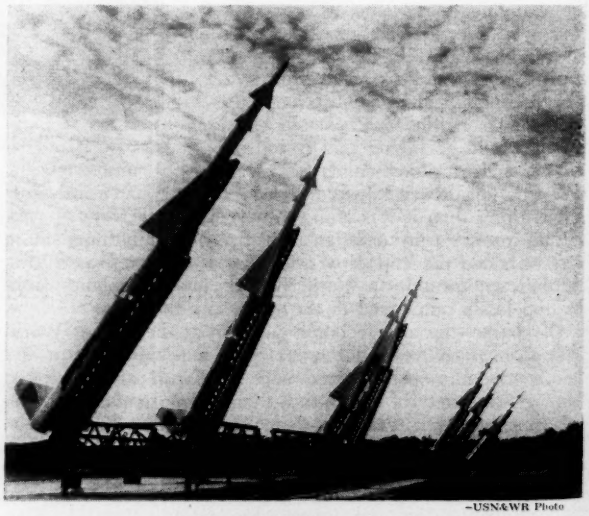
A Yes, they do, in varying degrees. The ones that you're speaking of, I think, are those that are intercepting target planes, and they must be given a degree of maneuverability that's greater than the maneuverability of the target plane. Otherwise they would not have the ability to intercept it.

Q Do they ever get away from you and come back to the terminal point?

A Well, you know, one did get away from us not so long ago. It didn't do us any good in Maryland, where it fell. This is a very rare, accidental type of thing, I've never heard of one getting away in the sense of coming back to confound its master back at its home base.

Q Are they a sure-fire defense against airplanes? Will they always knock down a plane?

A No, they are not sure-fire. They are not 100 per cent weapons, and different ones differ in their effectiveness. However, they are good enough to do the job, and by that I mean this, that you can never build a weapon system that's good enough to do any job that you can imagine. What you have to do is to find a realistic job in a certain time scale and then you say: "I'll build a weapon to do a job in that time scale." That's the way our weapons are designed. I don't know of any of them that won't someday be obsolete.



—USN&WR Photo

NIKE: GROUND TO AIR

"The man on the ground makes certain command decisions that the machine executes"

. . . "There are two or three dozen kinds of guided missiles"

On the other hand, the problem is to make them good while you need them.

Q How good is the Nike? How would the Nike be against something like the B-50? Would that be a pretty lethal combination?

A Well, the Russians, as you know, have the TU-4, which is a counterpart of the B-29 rather than the B-50, although there is not a tremendous difference between those planes. It has never been possible, in the literal sense, to test Nike against those particular planes, but tests have been made of Nike, repeatedly in fact, against target planes and drones, and on similators in the laboratories, which establish to my satisfaction that Nike would be effective against such an airplane.

Q Some of the Air Force people seem to think that there hasn't been a complete test of Nike against the best the Air Force can put up—

A And one must admit that it hasn't been tested against their most modern planes, for the very good reason that we don't want to sacrifice planes for such purposes. But, as I say, the Nike is designed to be and has shown itself in tests to be effective against the kind of target that one can reasonably expect it to be confronted by within its time scale.

Q Has it been tested only against sitting ducks, or has it been tested against planes that carry a counterweapon against the Nike?

A The attempt to counter Nike with a missile that would intercept Nike before Nike could make its kill is a proposition that I'm quite sure we aren't up against.

Q If the pilot of a TU-4, say, saw one of these coming, he couldn't take violent-enough evasive action to escape it?

A That's why I said the maneuverability of the missile has to be such as to exceed the maneuverability of the target it has to encounter, and such maneuverability has been designed into the Nike.

Q Would that include the MIG jet fighter? Could it outmaneuver a MIG?

A This is a war game we haven't been particularly interested in.

Q In time of war, what happens to missiles that are not actually used on targets, or miss their targets? Do they become harmless? What happens to them?

A They would have self-destruction features that would dispose of them before they could fall on friendly territory.

Q Do they go off with a big bang?

A Oh, yes, they go off with a bang.

Q What happens to the frame? Does it hit you on the head down below?

A You have here the same problem, only with less degree, that you have with any antiaircraft artillery. You have to reckon with the fragments. Actually, the experience, for example, in defending London was that, with a fairly well-trained population, the injuries from fragments were not an important aspect of the battle.

Q Are there many types of guided missiles?

A Yes. There are two or three dozen kinds of guided missiles, depending on just what you'd count as a different missile. We tend to call varieties of missiles within the same family one missile, counting Nike as a family and Terrier as a family, and so on.

Q Some are for long range, some are for short range, some are for intercepting, and so on?

A Within the same family they would be quite similar—maybe increased capability in going from one generation to another, but similar devices with similar missions. As between different families, they range all the way from fairly short-range, air-to-air missiles through ground-to-air types, which have longer but still relatively short ranges, and into surface-

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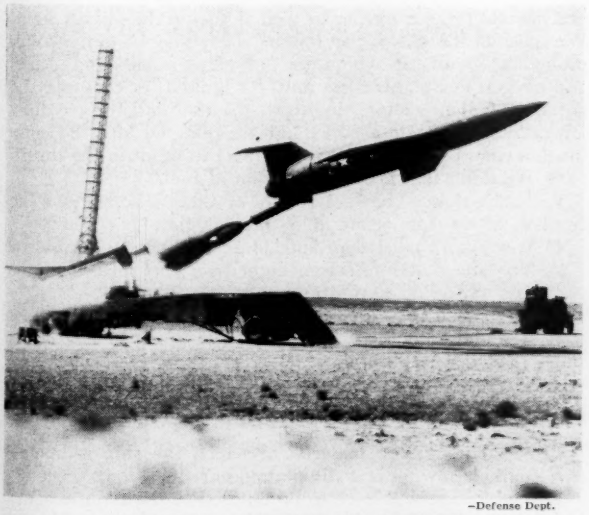

—Defense Dept.

MATADOR: SURFACE TO SURFACE

"A pilotless aircraft . . . independent of an airfield . . . navigated quite precisely to a target"

—Defense Dept.

FALCON: AIR TO AIR

"Our aim is to be accurate enough to hit what we need to hit"

. . . 5,000-mile flight "a matter of 30 or 40 minutes"

to-surface missiles that might range out into intercontinental distances.

Q Didn't the Germans use a type that ranged up to 300 miles or more?

A They used principally two ground-to-ground types. The V-1 was a subsonic, fairly primitive sort of missile, with a pulse-jet motor. It was used in considerable quantities and caused considerable damage until a defense was built up to take care of it. Toward the end of the war, the Germans brought out their ballistic missile, which we called the V-2, which was the forerunner of a very much more dangerous family of weapons.

Q The Germans built all the directions into that V-2 so that it was directed from take-off on to a preset course. Now, do the guided missiles, ground-to-ground, use anything of the type that the interceptor missile uses to find its target at the other end?

A There are different kinds, and the answer is that some do and some don't. The word "ballistic rocket" implies that the missile in the major part of its course is a free-flying body, traveling without external influence just the way a bullet would travel after it left the gun. The Germans did have some correction of the course and range of the V-2, but that was very early in its flight, and after that final correction, it flew as a ballistic missile—that is, it was free-flying.

GOAL: GREATER ACCURACY—

Q How accurate were they?

A They were in the 200-mile class, and at that range about half of them would fall within two miles of the target —probable error of about 1 per cent of the range.

Q So that they could hit a city?

A Yes, at that distance.

Q Within a 2.5 or 3-square-mile radius—

A Within a 2-mile radius. That means you'd have half of the missiles fall within a circle four miles in diameter. That's what we mean by "circular-probable error."

Q What is your aim now about accuracy?

A Our aim is to be accurate enough to hit what we need to hit.

Q Is that in the nature of a 1 or 2 per cent error?

A No. Even 1 per cent in intercontinental distances wouldn't be good enough. You'd just know what country you were going to hit.

Q Does what you say about the preference of manned aircraft over the guided missile mean that as far as you can see there never will be a very accurate intercontinental guided missile—it will always be kind of hit or miss?

A Oh, I didn't mean to imply that such long-range missiles wouldn't be accurate nor that they wouldn't be effective. I merely meant to imply that when you consider that once you commit a missile to its mission you are done with it and the next mission you have a new missile—that when you take all of that into account, a manned bomber, if it has the ability to do the job in the face of the opposition, would probably always be the better way to do it.

Q Is the long-range missile more expensive than the long-range bomber?

A No, not one for one. We would expect a missile to be considerably cheaper than a manned bomber; but here you run into the question of how many flights you expect to get out of the bomber, and your crew and all the rest of it enter into the equation.

Q Do we have effective countermeasures against enemy guided missiles?

A We certainly have some countermeasures against enemy guided missiles. We would scarcely expect them to be completely effective.

Q About how fast can missiles travel?

A Missiles travel all the way from somewhat below the velocity of sound, as in the case, for example, of the Matador, to velocities that range up to perhaps 20 times the velocity of sound. A ballistic missile with a range of 5,000 miles would have something like the latter velocity. There's no secret about it. Anybody with a slide rule and the formula could sit down and figure out what that velocity is.

Q How do you get power of that magnitude?

A You get it by developing powerful rocket motors. Now, here I want to be careful. There are different kinds of missiles that might cover a 5,000-mile range, but I am now talking only about the ballistic missile that shortly after launching reaches its maximum velocity and thereafter travels as a free-flying body, or a free-falling body.

Q And nobody is guiding it beyond that?

A After burning out its motor and after leaving the atmosphere, all of which takes place in the early part of its flight, it would be on its own. Now, you ask: How do you get those velocities? Well, you would just build rocket motors strong enough to push them that hard.

HOW TO FUEL A ROCKET—

Q Are they a kind of jet motor?

A A rocket motor is a kind of jet motor. When we speak of jet motors, we ordinarily refer to the kinds of motors that are used in our airplanes which burn their fuel with the oxygen of the air through which they travel. The kinds of missiles that we're talking about, however, don't travel through air that is dense enough to supply the oxygen, so you have to provide oxygen as well as fuel in the missile itself. We speak of these as rocket motors. They may be either solid-propellant motors, in which the propellant combines the fuel and oxygen in a stable form until it's ignited; or they may be liquid-propellant motors, in which the fuel and the oxydizer are carried in separate tanks and are pumped into the combustion chamber of the motor and react to produce the thrust.

Q Wouldn't that take an awful lot of fuel?

A That's right. The fuel in any of these systems is a big fraction of the total content of the missile.

Q It wouldn't take them long to go 5,000 miles, would it?

A No. The 5,000-mile free flight over the surface of the earth is a matter of 30 or 40 minutes.

Q The speed of a high-powered-rifle bullet is three times that of sound, and these things will run along at five or six times that of a rifle bullet?

A That's right.

Q What altitude do they hit?

A Several hundred miles.

Q What about the material of which the ship is made—is it titanium now, or is it still aluminum?

A The design will have to be tailored to the requirements. Different parts of the design will have to be of different materials, probably including titanium as well as steel and aluminum.

. . . "Research program continuing at the Korean peak"

Q Then these things are simply in the blueprint stage?

A They are under development.

Q We used to hear that by 1960 we'd have some of these intercontinental guided missiles. Can you comment on that now?

A Well, I never used to say that, so I don't have to defend it.

Q What are the other types of missiles, other than the ballistic type?

A You could build a guided missile like a manned aircraft, leaving the men out and using robots in their place. Guided missiles range all the way from such pilotless aircraft to the ballistic missile.

Q Then those missiles that you hope to reach an altitude of hundreds of miles and have a range of 5,000 miles are not actually in existence, so the performance figures and ranges that you have been giving us are matters of theory?

A In a sense, yes. However, the path, time and altitude and all the other characteristics of a missile that follows a free-flight path are all things that nature has ordained. It isn't exactly theory. It's nature.

Q In other words, you know it can be done?

A We know if you get the right materials going fast enough and they don't burn up coming back down, it can be done. To say that we know it can be done implies a practicability that I would not care to comment on.

Q Wasn't it done in the V-2 by the Germans and isn't this just roughly a bigger V-2?

A Well, except there's a big jump from 200 miles to 5,000 miles.

Q Can you say what the range is of any missiles that we have developed and actually have been fired?

A No.

Q Is there an altitude record that you can talk about?

A There is an altitude record that has been made by research rockets designed for the exploration of the atmosphere and for other scientific purposes. I believe they set an altitude record of about 250 miles.

Q They have been found when they came down?

A Yes, parts of them were found when they came down. But they were tracked and they telemetered their information while they were up in the air.

Q Do they burn up when they return to the denser atmosphere?

A That depends on how they are made and how far they fall. The 250-mile one did not burn up.

ADVANTAGES OF MATADOR—

Q How about the Matador pilotless bomber—are there any unclassified figures as to how long its range is?

A No, its range is classified. I can say that it is a subsonic airplane type of pilotless aircraft with a zero-length launcher, which is the big feature of the Matador.

Q What is the advantage of a plane-type missile?

A In the first place, the Matador has a zero-length launcher, which makes it independent of an airfield. In the second place, it has a control and guidance system which enables it to be navigated quite precisely to a designated ground target—

Q By a man on the ground?

A Navigated by a man on the ground, that's right. And in the third place it has speed and controllability features that are up in the high-performance category even in modern piloted aircraft.

Q Is there anything to guided missiles' being controlled by the stars?

A Stellar navigation is one of the means of navigation that could be employed in these long-range systems. By stellar navigation we mean a system which observes certain bright stars in the heavens and computes position and course from the observation of these stars.

Q Is that done within the rocket or on the ground?

A It would be done within the missile.

Q There have been quite a few scare stories within the last few months which indicate that the intercontinental missile is practically here and that possibly the Russians are already building them and there is no defense against them. But the whole implication from what you have been saying is that that terrible age is still quite a way off, and there is no assurance as yet that we are actually going to be able, or they are actually going to be able, to make such a weapon—is that right?

A You have to be careful in answering that question, because one side might be satisfied with shorter range, lower accuracy, or poorer performance than the other would consider useful. There are all kinds of qualifications of that sort that make a direct answer to your question difficult. I think, though, it's fair to say that, while the art is being pushed forward, it will be some time before it appears in the advanced, refined forms that we've been talking about.

GERMAN SKILL WITH ROCKETS—

Q Who got the better-qualified German guided-missile experts at the end of the war—the Russians or ourselves?

A The Russians took over the bulk of the German Peenemünde operation. While some very fine German scientists came to this country, they doubtless got more in number than we did.

Q That isn't a governing factor, though, is it?

A No, I don't think it is a governing factor. I think it has been of substantial help to them.

Q Had anybody besides the Germans during the last war done any work on a V-2?

A No other power poured anything like the technical effort into that problem that the Germans did during the war.

Q No one was certainly at the level that the Germans were?

A I think that's a fair statement.

Q They were unable to return a missile to the Germans—

A No one was able to pay them back in kind—that's perfectly right.

Q Has your research program been cut back any?

A Substantially we are continuing at the Korean peak, and we believe it is very important that we continue to do so.

Q Is much of it in the atomic-energy field? Is that tending to take more attention?

A The atomic weapon proper, the atomic warhead, is the responsibility of the Atomic Energy Commission. A very large amount of fine work has been done and is being done by the Commission in their field. The Department of Defense is devoting a lot of attention to developing the equipment to use these warheads. This has been a very active and effective joint program.

(Continued on next page)

. . . "There are nerve gases both sides have known about"

Q Are you planning atomic power for tanks or ships?

A Well, we are looking at atomic power for a number of military uses. We have the *Nautilus* in operation with an atomic power plant, we have more advanced power plants being developed for submarine propulsion, we have a development project for application of atomic power to larger naval vessels, and we have a large project for application of atomic power to aircraft propulsion. Then we have a reactor project in the Army for developing an atomic power station for field use. So, there is a very broad field of application of atomic power to military purposes as well as atomic explosives to weapons.

Q Is the atomic cannon likely to be continued as a weapon?

A Certainly for some time. I would say that as of the present time it looks like a valuable weapon.

RESEARCH INTO GAS WARFARE—

Q Are you responsible for research into chemical and bacteriological warfare?

A The Department of Defense has such research work as part of its area of responsibility. In that particular field, it's largely carried on within the Army and under the general supervision of my office in the same sense that the other military research and development projects are.

Q Is that a serious problem?

A Oh, yes. The attention that is given to it is important and serious.

Q Is it dangerous? Is there a threat from that source?

A It is exceedingly dangerous. What the threat of its being used against us may be is more speculative, just as it was speculative whether gas would be used in the last war.

Q Is there a nerve gas that is available and produced?

A There are nerve gases that both sides have known about for some time.

Q They would be used against the people in general as well as troops?

A They would be toxic and dangerous against people wherever people were. What they might be used for is a speculation that I wouldn't care to go into.

Q What is the character of this nerve gas? Is it lethal, or paralyzing, or what does it do?

A It's a particular kind of poison that attacks the nerve centers and causes a paralysis which, in turn, causes death. As compared with the poison gases used in the first World War, the nerve gases have peculiar properties that make them lethal in small doses.

Q Why is there a tendency for people to be so concerned about the danger of the H-bomb and not particularly concerned about nerve gases? Why is there the feeling that the one is likely to be used and the other is not likely to be used? Is there any justification for that feeling?

A I think only this justification: If you are in the business of destruction, the H-bomb looks to be about as efficient a way to do it as you can imagine, and therefore it is logical to assume that the other fellow will use the most efficient way he can.

Q Were any poison gases used in World War II at all?

A There were a few allegations that gas was used. I don't believe they were ever substantiated, and so I think probably the answer to your question is "No."

Q Isn't this business of war getting so complicated that there aren't many people who will be able to engage in it?

A I am afraid complication won't keep people from engaging in it. We hope common sense will.

Q Only two peoples can develop these things. They are the Russians and ourselves, and maybe the Germans and British someday—

A Well, I wouldn't say there are only two peoples who can develop them, but I would say that achieving an across-the-board competence in modern warfare requires very great resources. However, you don't have to have very many of these exceedingly lethal things to have great destructive power in your control.

Q The small nation could get a few things and challenge a greater nation—

A It is conceivable that they could.

Q Is private industry getting something out of all this? Are they learning a lot that they can use as well?

A I think that there is a give and take between the research and development devoted to military purposes and the research and development devoted primarily to industrial purposes. Each gains from the work of the other, and together they advance the whole science and technology of the country.

Q Are you satisfied with the measures being taken to protect our research secrets?

A No, I'm not satisfied. In principle I think we are striving to do the right thing; in practice I am afraid we fall down badly now and then. This is just the old human frailty when you are struggling with a big, complex problem. You are never right all the time. I think the principles we are following, of trying to keep the public well informed and, at the same time, withholding from publication things that would be helpful to an enemy, are well conceived and sound.

KEEPING OUR SECRETS—

Q Have we really "leaked" any important secrets to the enemy through inadvertent public speeches?

A Our system of public information, keeping the public informed, with all that goes with it, undoubtedly leaks some valuable information to the enemy.

Let's put it this way: If the Soviets would give us item for item what we give them, we would be a lot better off today, informationwise, than we are. In my view, however, this is the price we pay for democracy and keeping the public informed. So that if you then ask me whether we should adopt the Russian system, I would immediately say "No," even though, in a narrow sense, their system is a lot more effective than ours in withholding information that an enemy would like to have.

In the broader sense, however, I think our system is better than theirs, because I think we can do a better job in the long run with an informed public and our system of security than they can do with a slave public and their system of security. We should be able to do this job of keeping our people informed and, at the same time, be reasonably successful in safeguarding things that would do more harm by helping the enemy than the good they would do by informing our own people.

It's a matter of more careful and alert administration rather than changing the whole approach and philosophy. It calls for co-operation between Government people and publication people, too. Again, I would say that our principles here are quite clear and well conceived, but applying them has its difficulties.

. . . "I believe we can stay out in front of the Russians"

Q What about air defenses—the radar screen and things of that kind? Are they effective?

A Yes, they will contribute importantly to our defense. The two radar warning lines that we are now in process of installing, one across mid-Canada and the other across the northern Arctic line of Alaska and Canada, together with the seaward extensions of those lines, will certainly be effective in giving us earlier warning, substantially earlier warning, of enemy bombers over what would be their preferred route of attack.

However, even with such warning, and with the greatly improved defensive weapons that we are developing, including improved interceptors and improved defensive missiles, it will still be a very difficult problem to intercept and destroy all or even a very large fraction of the planes that might come over in a mass attack. So that we mustn't be deluded into the concept that we can have an airtight defense. Our primary defense must be to deter aggression. If we should be attacked, Civilian Defense will have a very big and important job to do in handling the problem that will be confronting our cities.

Q Do you think war will be so horrible that it won't be engaged in?

A I hope so—that is, I hope it won't be engaged in. I know it would be horrible, but I don't think that that in itself will stop it. I believe, however, that if we keep working for peace from a position of strength, it will be possible to avoid war.

2 BILLIONS FOR RESEARCH—

Q In the military establishment, is research and development a large operation?

A It is a large operation. In any other environment, I think it would rate as a very large operation. There it is dwarfed a bit by procurement and some of the even bigger things. It involves in the defense establishment as a whole something approaching 2 billion dollars a year in the total area that it covers, although only about 1.2 billion is actually direct Research and Development expense.

Q This does not include atomic energy, does it?

A This is the Department of Defense and does not include atomic energy, for which the Department of Defense is not responsible, although we have a very great interest in it and are in very close touch with it.

Q Is your research and development in Government laboratories and developmental agencies, or do you work through universities and industry?

A We do all of those things, in fact. The Research and Development dollar is divided—the direct dollar that I referred to—is divided about 60 per cent to industry, another 10 per cent to nonprofit organizations such as universities, which means 70 cents out of each dollar contracted, and the other 30 cents out of each dollar is spent within the Government—that is, in shop. Now, that arithmetic begins to look a little different if you include the indirect military expense in shop. Then the in-shop proportion comes about 50 per cent of that greater total. But, anyway, that gives you an idea of how it is spent.

Q Is it enough money to keep us ahead of the Russians?

A Again, one has to qualify an answer to the question. It is my own belief that if we manage the resources that are now made available to us well and get the most out of them, then we can stay out in front of the Russians.

Q Then you feel that we are out front now?

A I feel that we are out front now, taking the broad sweep of the whole technology, although that isn't meaning to say that we're out in front in every detail.

Q Is this a higher proportion of the defense dollar going into research and development than ever before in peacetime?

A This is maintaining the highest dollar level of research and development that we have ever maintained in peacetime. The proportion of the defense dollar devoted to research and development is also at a high level.

Q It is often said that this country doesn't engage in pure science but always lags behind. Is that true?

A Certainly this country up to a generation ago was more notable for its application of science than for its original work in fundamental science. However, in the last generation there's been a very great change, and I would say that today this country is notable also for its work in basic science, much of which, to be sure, is contributed by people who came to this country to make their homes. Increasingly, however, it is also contributed by our own scientists in their own right.

YOUTHS NEEDED IN SCIENCE—

Q Are young people showing a greater interest in science?

A Unfortunately, they are not. As indicated by registrations in science training of various kinds, our young people are not showing as great an interest in science and engineering as one would expect and as one would believe desirable in the interest of the long-term security and welfare of the country.

Q Is there anything we should do about that?

A Yes, I think there are things that can and should be done about it. As a matter of fact, there is a considerable amount of interest in this problem across the country, and on many fronts things are being done. It's a very broad problem, however. It starts way back with the high-school curriculum and runs all the way through our educational system. It also deals with the matter of public support for higher education and the extent to which the Federal Government should subsidize advanced training, particularly in the physical sciences. All of these are factors that certainly require a careful study.

Q The end of the GI Bill of Rights might discourage some people from going to college—

A The end of the GI Bill of Rights will have an effect here in reducing the number, but, of course, there are offsetting trends. Whether the number will increase or not, it is difficult to say, but I do agree that this is a problem that merits serious consideration.

Q Are any of your funds devoted to scholarships? Do the military services do anything in this field?

A We support research in the universities that is pertinent to the military job, but we support it through performance contracts which, in turn, undoubtedly support graduate students to a very considerable degree. Except for the specialized training for our own officers and the like, we do not support scholarships or fellowships in the sciences because this goes beyond our military function.

The National Science Foundation has been assigned the broader responsibility of the Federal Government in this area. We do support the Science Foundation in its attempts to cover this field.

Interview with SPACE-SATELLITE SCIENTISTS
Dr. Waterman, Dr. Shapley, Dr. Spilhaus

ABC'S OF TRAVEL IN SPACE— SATELLITE NOW, MOON NEXT?

Is the day of space flights just around the corner, now that the U. S. is planning to send an artificial satellite spinning around the earth, outside the atmosphere?

What is it like out there? Could a man survive? Can scientists really do this? And, if they succeed, what good will it do?

To get answers to questions such as these, the Board of Editors of *U. S. News & World Report* interviewed together three scientists who are leaders in the satellite project.

Dr. Alan T. Waterman is director of the National Science Foundation. Dr. Alan H. Shapley is vice chairman and Dr. Athelstan F. Spilhaus is a member of the U. S. Committee for the International Geophysical Year.

The transcript of the interview was later approved by the three scientists.

Q Can you explain for us, just what is this so-called man-made satellite that the U. S. is going to build?

A Well, to put it briefly, the satellite is a small metal object that is going to be projected out about 200 or 300 miles into space and then sent spinning around the earth at speeds of around 18,000 miles an hour. It may be equipped with electronic instruments to report what it finds out there and send those reports back to us here on the earth.

Q This sounds like Buck Rogers or Jules Verne. Is it really the beginning of space travel? Is man actually going to be able to fly to the moon or maybe to Mars?

A We're not buying any space helmets.

Q Isn't it a step in that direction?

A This is a normal, small step. It seems like a terrific step, but it is just the next in an orderly series of experiments.

Q Couldn't this satellite lead to some of these Buck Rogers types of things that people speculate about, such as a big landing platform, or way station, circling out in space, and eventually to flights to the moon or Mars?

A It is possible—but we have to know more about a lot of things before we can say. We can do it only systematically, step by step.

It's something like the launching of the first plane by the Wright brothers. The first thing was to find out if we could fly. You can talk about what else you are going to do later, but there is first the if—can you even get started?

In talking about space flight, first you have to send up these experimental satellites and see what they can learn, find out what materials are best, what the conditions are that you will encounter out in space. You make very certain that you know all about that environment and what is necessary to cope with it.

Q What is the next step?

A The next step might be to see if you can shoot one of these little satellites out and make it go round the moon.

Q How about shooting people out into space?

A You are not talking about people at all—yet. Before we start going outside the atmosphere ourselves, we'd better find out if this little satellite can do it.

Q What would happen to a man out there in space?

A He would be burned up by the heat or he would explode because of the vacuum.

Q So you think it's still going to be quite a while before man can fly to the moon?

A Yes, that's a long way off.

Q The first reaction of a lot of people to this satellite announcement was a kind of fright. People read a military meaning into it, seemed to think it had something to do with war. Is there really any reason to be frightened?

A I should certainly think not.

Q Could one of these satellites be converted into a weapon?

A Hardly. This is completely different.

Q But couldn't somebody build something that could travel around in space and then smash the earth?

A Well, how could they do it? Suppose you were figuring on the possibilities of this thing dropping bombs. Remember, it is going very fast—about five miles a second. Remember anything you try to drop out of it won't drop. It will just keep going around, just like the satellite.

Q Could this satellite be used for aerial photography—say, to take pictures of another country?

A There's no intention of making photographs.

Q Could you do that later?

A That depends on whether you could get a camera to televise pictures back. That would be a tough problem. If you couldn't do that, you would have to find some other way of getting pictures back to the earth without burning up from friction when their vehicle encountered the denser atmosphere.

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First Steps Toward Man's Flights in Space—More Facts On Cosmic Rays, Sun, Stars, Temperatures, Density, Dust

Q So this satellite is not connected then with President Eisenhower's proposal for mutual aerial inspection by the United States and the Soviet Union?

A Oh, no. Not at all.

Q Is there any chance that somebody would be able to put airplane landing fields up there in space?

A That jumps the gun too much. No one can say it's impossible, but I think one must emphasize all of the terrific problems involved.

Q Well, if this satellite is not a military weapon, what is its purpose?

A The purpose is to find out much more than we know now about conditions outside the earth's atmosphere.

Perhaps the best way of putting it is that it's just as if we were living at the bottom of the ocean. We see the light that comes through from above, but we can only judge from that what there is out there. Well, our atmosphere does the same thing. We get only partial information from outer space.

Q What is it that you want to learn about outer space?

A Oh, all sorts of things. We want to know more about cosmic rays, how the sun creates the ionosphere, about the stars, temperatures, densities—many things like that.

Q Is it really important to our daily lives to know all that about space?

A Oh, yes—of primary importance. I think the impact of all this basic data that we will obtain will be far greater than we can visualize at the present time. It will provide us basic, fundamental knowledge about the environment in which we live.

Q What are likely to be the immediate advances from this study?

A You just can't answer these questions sensibly about what is the immediate good, what is the immediate payoff. It's basic research. It's sort of an act of faith. If you read history you find that basic scientific discoveries made 50 years ago, which then were considered in the realm of utterly useless things, have become extremely important and useful to ordinary living.

Q Well, could you give us some examples of how this research might affect our daily life?

A For one example, interruptions to our transatlantic radio communications are caused quite directly by radiations from the sun that disrupt the ionosphere—the electrified upper layer of the atmosphere. You see, the sun has direct influence on whether or not you can talk to Paris.

The whole radio-communication industry is based on the use of the atmosphere. You get long-distance communication because the ionosphere has the property of reflecting radio waves. This provides communication beyond the horizon because the radio waves bounce back to the earth instead of escaping into space. When the reflecting layer is disrupted—when it's rough—then long-distance communications won't work.

Or take meteorology, for example—weather forecasting. Each country has done some work in weather observation, but it is very spotty. You will find only a few places around the globe where it is done well. We don't get anything at all from the whole Antarctic region, and we know that there are events occurring there that affect the weather of the whole world.

We have actually reached the stage where we can't improve our weather forecasting much until we can get world-

(Continued on next page)

—USN&WR Photo

DRS. WATERMAN, SHAPLEY AND SPILHAUS are interviewed in the conference room of *U. S. News & World Report*

. . . Would it help with guided missiles? "Yes"

wide information, including especially the polar regions. We are now stymied.

Q Then you think the studies planned with this satellite would improve our weather forecasting?

A Yes. You see, there's the sun out there behaving like a boiling kettle that erupts every once in a while and does all sorts of things to us. If we knew what that is, what it does to the outer air—once we can get the general pattern from all over the world—then this thing will become a rational pattern. It will lead ultimately to an improvement of our understanding of weather and climate, and will enable us eventually to make better forecasts. But I think that one should emphasize that this is a long-term thing.

Q Will the studies made with this satellite enable us to control some of these forces of nature?

A Well, in orderly science, you have to measure before you can understand, and you have to understand before you can predict, and you have to predict before you can start to control.

Q And what you are trying to do with this satellite is to measure, is that it?

A Yes. We hope to observe and measure phenomena that have never been accurately measured before.

Q But haven't we sent rockets up about as high as this satellite will go, and haven't these rockets sent back a lot of information about conditions out there?

A Yes. Our scientists have done a very clever job in instrumenting rockets. They make observations and send radio signals down. But a rocket is up there only momentarily. It just goes up and drops again. It will give you information while it goes up and down which tells you how things are at different layers at a certain time, but it doesn't tell you how these things change with time, because it isn't there long enough. If you can get something up there that will stay there, then you'll know how things are changing.

WHY U. S. SHARES FACTS—

Q What will be done with all this information that is gathered by the satellites? Will the U. S. share it with the rest of the world?

A Yes. You see, the launching of the satellite is being done as part of the program of research set up for the International Geophysical Year of 1957-58. This geophysical year is a period of time when scientists all over the world will investigate their environment with all sorts of geophysical appliances on a large-scale, global basis. There will be stations spotted all around the world. Forty countries are involved in this. Most of the countries of the world except China are already participating in the program.

Q Will all of this information then be exchanged?

A All of this information will go to a number of central clearing houses for the various fields of research.

Q Are the Russians taking part in this geophysical year?

A Yes.

Q But haven't the Russians announced that they are planning to launch a satellite of their own?

A They have announced in their press that they are working on some such thing. But no word from the Russians has been received by the International Council of Scientific Unions, which is sponsoring the geophysical year.

Q Do we have any assurance that what Russia learns from its satellite will be passed on to other countries? Or is this likely to be a one-sided affair on the part of the United States?

A We would certainly hope that, if Russia puts up a satellite, the information obtained from it could be made available to other countries, including our own, on the same basis that we have volunteered to make the data from our satellite available. Russia or any other country might set up observing stations which could keep track of this [American] satellite. This could mean that we would get more information on the orbit of this thing, which would be helpful to everybody.

We mustn't forget that in this research game the main thing is the know-how and understanding, and the side that gets the start is ahead to begin with. Everybody else has a great problem catching up.

Now, if we have confidence in the ability of our scientists and our engineers, we have already taken this early step and know what it's about. We are already ahead of them. So why should we care if they share in the scientific information?

Q But the Russians have indicated that they were thinking about trying to equip a satellite with cameras and television, which apparently are not going to be put in the satellite that America is planning. Does this mean that Russia is already ahead of us on this thing?

A There's nothing wrong with speculation. What they were saying has been said and written in this country many times. Any scientist could report the same thing. These things could have been written 10 years ago. It just seems to us more important to do something modest—and really to do it.

Q You are convinced that these Russian reports are based on speculation and theory, not on any practical experience?

A Remember, these are scientists talking, the kind of thing they can say. These are things scientists want to learn. We say the same kind of thing. Any scientist would. It is not news that the Russians are saying them, but it is news that they are so interested.

Q You say this satellite will have no direct military use, but will it give us information that will be useful militarily as well as scientifically?

A Well, it would be of use militarily in so far as finding out conditions in the upper air for air flight and communications. The military men badly need scientific information for all the things they want to do. Industry, commerce, almost everybody benefits from expansion of scientific knowledge.

Q Would it help with guided missiles?

A Yes, to the extent that guided missiles travel through the atmosphere and it is necessary to know what they will encounter. Any scientific information ultimately is used, or can be used, for many different applications. So that the use to which you put it is hard to predict.

WHAT'S OUT IN SPACE—

Q What is this satellite going to run into out there in space? What will it be like?

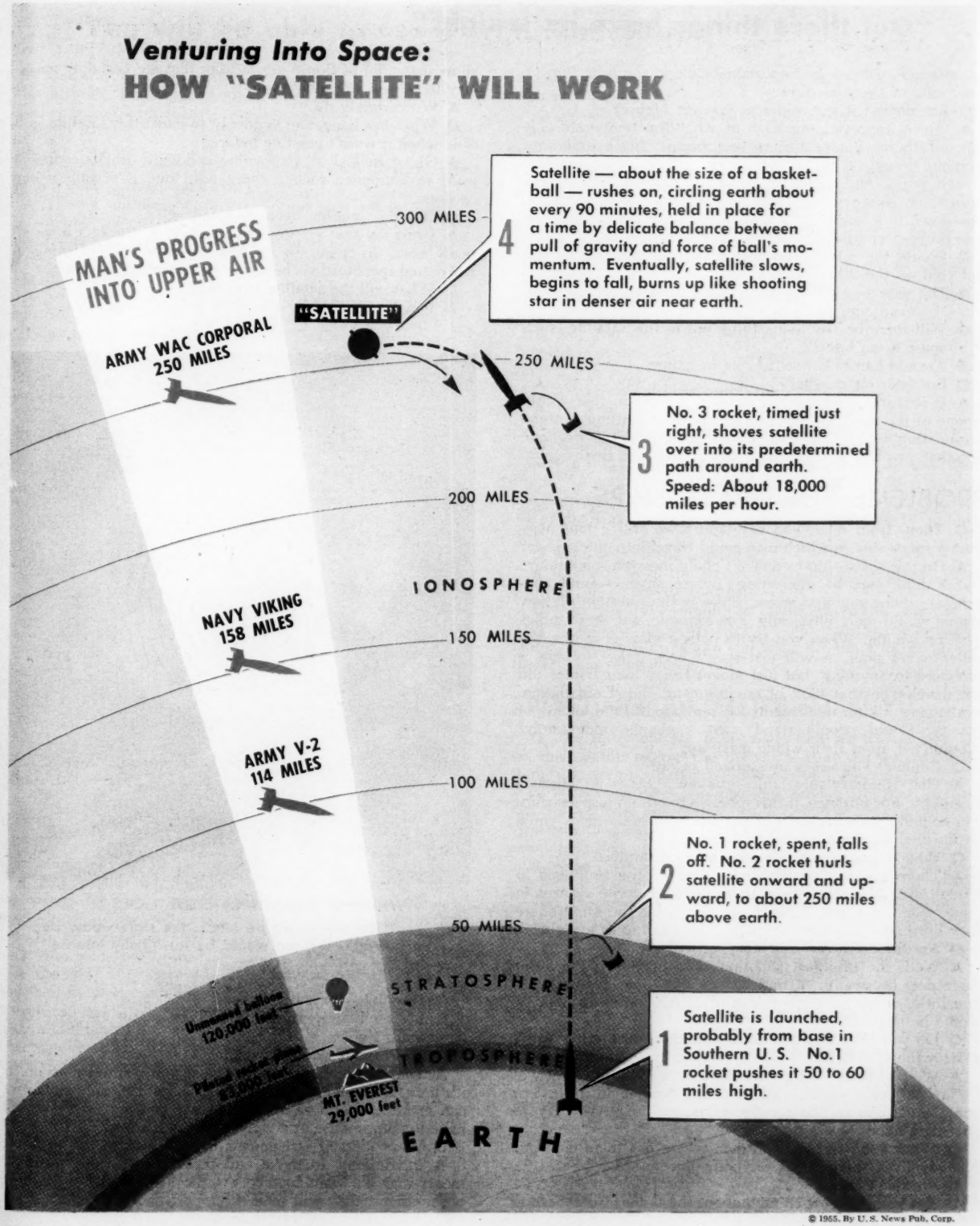
A Absolute silence, for one thing. The sky would be black, the stars would be very bright, the sun would be terrifically intense.

Q What kind of temperature will it find?

A The sun up there is terrifically hot, but we don't know just how hot this satellite will get. It depends on many things.

(Continued on page 70)

Venturing Into Space:
HOW "SATELLITE" WILL WORK


MAN'S PROGRESS INTO UPPER AIR
300 MILES
"SATELLITE"
4 Satellite — about the size of a basketball — rushes on, circling earth about every 90 minutes, held in place for a time by delicate balance between pull of gravity and force of ball's momentum. Eventually, satellite slows, begins to fall, burns up like shooting star in denser air near earth.
ARMY WAC CORPORAL 250 MILES
250 MILES
3 No. 3 rocket, timed just right, shoves satellite over into its predetermined path around earth. Speed: About 18,000 miles per hour.
200 MILES
IONOSPHERE
NAVY VIKING 158 MILES
150 MILES
ARMY V-2 114 MILES
100 MILES
2 No. 1 rocket, spent, falls off. No. 2 rocket hurls satellite onward and upward, to about 250 miles above earth.
50 MILES
STRATOSPHERE
Unmanned balloon 120,000 feet
Piloted rocket plane 83,000 feet
TROPOSPHERE
MT. EVEREST 29,000 feet
1 Satellite is launched, probably from base in Southern U. S. No. 1 rocket pushes it 50 to 60 miles high.
EARTH

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. . . "Out there things have no weight"

For instance, color is an important factor in the reflection or absorption of the sun's rays.

Q But doesn't it get colder as you get higher?

A We've improved our idea of what the temperature is like out there. Before the rockets began this exploration, everyone thought that the temperature fell off as you reached a high point, and went to about 70 degrees below zero Fahrenheit. Now we know that's all wrong. The temperature goes down to a low point and then comes up high, and then goes through alternately cold and hot layers.

Q Would the satellite be hot on the side toward the sun and cold on the other side?

A The side toward the sun would certainly get terribly hot. Of course, you could make it rotate.

Q Will there be any living thing put in this satellite—such as a mouse or an insect?

A I would hardly say so, for the first time.

Q But later on, maybe?

A If it works, and we can develop it further, that would be one of the steps. Another thing would be putting in some germinating seed to see if the cosmic rays do things to them. But that involves getting those things back on earth again.

PROBLEMS FOR SPACE SHIPS—

Q Then, from what you say, aren't we still a long way from a space ship in which man could travel into outer space?

A On this space-ship business, I could mention some things that I think may be interesting. Before anyone could contemplate going out into space, there is the question of how people would react physically. For example, out there things have no weight. When you try to pour a glass of water, the water won't pour, it will just stay where it is. Nothing is anchored to anything, but just moves freely. Our bodies did not develop in that kind of environment. Blood circulation, swallowing, all our movements are regulated to the feeling of gravity. Could people stand such a change indefinitely? Wouldn't it upset their whole make-up?

Q Couldn't you use a pressurized cabin?

A That wouldn't solve this situation. This is an absence of gravity. For instance, if this room were out on a space ship, you couldn't walk. When you pushed against the floor you'd go up to the ceiling.

Q What other problems would man encounter?

A There are lots of problems. One of the problems in space travel is the density of these little meteorite swarms in outer space. You see, when these things hit the atmosphere they burn up. They are tiny little things as big as a pinhead.

Q Are these the shooting stars we see?

A Well, the brightest shooting stars may be larger. But there may be swarms of these things out there. Naturally, if you hit a swarm of these things at 18,000 miles an hour, it would be terrific.

Q Do you have any assurance that these meteorites won't destroy the satellite?

A Well, of course if they are there in that density, that will be an extremely valuable piece of information in itself. But these are some of the terrific unknowns when you try to speculate about space travel.

Q What good would it do man to get out there anyway? Nobody lives there. Does anybody live on Mars?

A We don't know.

Q But you do know enough about the outer atmosphere to know that a lot of things are lacking that are certainly necessary to human life, don't you?

A We certainly do.

Q What has happened suddenly to make this satellite possible when it wasn't possible before?

A Oh, it isn't at all happening suddenly. But one doesn't want to announce such a thing until one is certain it can be done.

Q Has this satellite been designed yet?

A I can say that we know we can do it. Rockets have already been up there. So it's only a matter of perfecting it. But actual specifications have not been worked out yet.

Q What will the satellite look like?

A It will probably be round, to reduce friction.

—Wide World

WHERE THE EARTH SATELLITE GOES . . .

. . . "The sky would be black, the stars would be very bright, the sun would be terrifically intense"

Q How big will it be?

A It's anybody's guess. It will be about the size of a basketball, I guess.

Q How much would it weigh?

A That would depend upon what you wanted it to do. If it's light, it's easier to get up there. Of course, the heavier we can make it, the more instruments we can put in it. We will have to compromise at a weight that is feasible.

Q What kind of instruments do you plan to put in it?

A Instruments to make and report the various measurements that we want to take. As the instruments make their observations, they will send the report back by radio signals.

. . . "You will be able to see it with binoculars"

Q Can that be done now?

A Actually, that is a very old thing. They've had them on weather balloons for many years, for instance.

Q But it can't take pictures and send them back to earth?

A No. Not now, at least.

Q After you get this satellite up there, what keeps it moving in a circle around the earth?

A There's nothing to stop it. Ordinarily, you see, things are stopped because of the friction of the air. But up at that height there is no air—or almost none. So, with no friction to slow it down, the satellite will just keep going.

Q Indefinitely?

A No, because there is still a little bit of air at that altitude. So the satellite will spiral in gradually. But we hope it will stay up for several days, at least.

HOW GRAVITY HELPS—

Q What holds it on its course around the earth? Gravity?

A Yes, gravity—the pull of the mass of the earth—is always pulling it down. But, like anything moving in a circle, centrifugal force is also pushing it out. At any given distance and speed, these things balance. What you do is balance the two forces, and then it goes in a circle, traveling constantly at the same distance from the center of the earth—or almost. Probably its course will be slightly elliptical, just like the earth's orbit around the sun.

Q You say it will go 18,000 miles an hour. How did you figure that as the exact speed at which it should travel?

A There is a simple equation for this: g equals v squared over r. In this equation, g equals the gravitational acceleration, r equals the radius of the circle it travels, which is the distance from the center of the earth, and v equals the satellite's velocity or speed. We know g and r, so it's a simple matter of solving the equation to find v.

Q How will you get the satellite up to that height?

A It already has been done. Remember those high-altitude rockets?

Q How high have they gone?

A The highest is 250 miles.

Q Well, if you know the shape of this satellite, and you know the instruments that you want to put into it, and you already know how to get a rocket up 250 miles, what's the remaining problem?

A This satellite not only has to be put up there, as far as the rockets have gone, but it then has to be started off in a new direction—paralleling the earth—at a speed of 18,000 miles an hour, or five miles a second.

Q How will you do this?

A One way is to have the rocket go straight up 250 miles and then shoot the satellite out horizontally. It may be more economical to have the rocket go up on some kind of a curved path and at the top accelerate while going in the right direction. We may have to find something in between. But that's the problem—to get the thing going up there in the right direction at this whopping speed so it will stay in the desired orbit.

Q Do you know whether you can attain such speed?

A Yes, we think we can. That's why we made the announcement.

Q How do you propel an object out there in space?

A Well, you have to have a stream of hot gases coming out behind which makes the thing go forward. When you are in a place where there's no air, you can't get any push from the air.

Q What do you push against then, to obtain momentum?

A You don't push against anything. You throw away a mass behind you, and the reaction is that you go forward. There was an example they used in my school days: How would a fellow without any atmosphere about him get off a perfectly smooth table? The answer was that you'd take off your boot and throw it away from you and you would fly off in the opposite direction. Or it's like two ice skaters: When they push against each other, they glide off in opposite directions.

Q You say you expect the satellite to come down after a few days. Will it return to earth and be recovered?

A No. You see, it will be traveling at such terrific speed that when it hits the earth's atmosphere, where there is friction, it will burn up—like a meteor.

Q Why won't it burn up on the way up?

A We won't allow it to go so fast on the way up. It attains that 18,000-mile speed after it leaves most of the atmosphere.

Q How much is this satellite going to cost?

A We don't know until we know for certain all the plans for it. An estimate by the U. S. National Committee for the International Geophysical Year—it was only a rough estimate—is that it will be something on the order of 10 million dollars.

Q Who will do the launching?

A The experts of the Defense Department who have been working on upper-air rockets.

Q Where will the satellite be launched? In this country?

A It depends upon what are the best, most feasible places, and that depends on where you want the thing to travel. All this still has to be worked out.

SPOTTING SATELLITE IN SKY—

Q The statement has been made that we will be able to see this satellite as it circles the earth. How can we see something the size of a basketball 200 or 300 miles away?

A It depends upon how fast it is moving and how the sun hits it. Actually, of course, the statement that it will be visible to the naked eye should be qualified. I think the best estimate is that, if you knew just where it was, you might be able to see it without a telescope, but the problem of finding just where it is at such speed is tremendous. After all, it will be traveling horizon to horizon in about three quarters of an hour. But the astronomers are convinced that you will be able to see it quite easily with binoculars.

Q But you aren't going to be able to walk along the street, look up and see it, rather casually, are you?

A No, not with the naked eye. If you have ever had a chance to watch any of these weather balloons go up, you can see one of them for a long time if the sun is shining on it and if you keep looking at it. But the instant you look away you have trouble because you don't know where to look back to. You lose it very quickly unless you keep watching it. It's that kind of thing.

Q The most you could expect to see would be a tiny speck of light, wouldn't it?

A That's about all.

Q Would this satellite look like a flying saucer to a man in an airplane?

A I don't know. What does a flying saucer look like?

THE END OF THE TALBOTT STORY

The work of a businessman in Government now is ending with the resignation of Harold E. Talbott as Air Force Secretary.

Senate investigators had raised this question: Was it proper for Mr. Talbott to be both Air Secretary and a partner in a firm doing business with some defense contractors?

Before President Eisenhower could read the whole record and announce a promised decision "on the basis of the ethics involved," Mr. Talbott resigned.

Here you get the final chapter of the Talbott story in the text of letters exchanged by the President and the Secretary.

Following is full text of the exchange of correspondence between the President and the Secretary of the Air Force as released at the White House on Aug. 1, 1955:

DEAR HAROLD:

The Secretary of Defense brought to me, this morning, your letter of resignation.

I know full well and appreciate deeply the tireless energy and effort you have given to the Air Force. Under your leadership, it has become ever stronger in the defense of our nation. Your diligence in the administration of your Department has been unexcelled. On behalf of our people and their government, I commend you for your fine accomplishments as Secretary.

As a result of public inquiry into your personal business activities, I realize that you have been subjecting yourself and your position to a most severe and searching scrutiny. I, like all others who know you, have been sure that your ultimate decision would ignore any personal desire or inclination and would demonstrate your devotion to the Air Force and your concern for the security of our country.

Your decision to resign, of course, has been a difficult one for you because there has been no intimation that your official duties have not been effectively and loyally performed. Nevertheless, I feel that, under the circumstances, your decision was the right one, and I accept your resignation.

I am informed by the Secretary of Defense that your Department is currently engaged in a number of critical programming activities in which your personal knowledge is of particular importance. He is convinced that in the interest of orderly turnover and for the welfare of the Air Force, these activities should, if possible, continue for about two weeks more under your direction. I agree with him. Therefore, I hope you will find it feasible to remain at your post through the week ending August 13th.

As you return to civil life, my warm wishes for success go with you and your family. The contributions you have made to the strength and security of our country will remain in your memory, I hope, as a source of great personal satisfaction.

Sincerely,

DWIGHT D. EISENHOWER

—Harris & Ewing

HAROLD E. TALBOTT

Secretary Talbott's letter submitting his resignation to President Eisenhower, to which the foregoing letter is a reply, is as follows:

DEAR MR. PRESIDENT:

Because I would not in any circumstances wish to be a source of embarrassment to you, or to your splendid Administration, I herewith tender you my resignation as Secretary of the Air Force, to take effect at your pleasure.

I consider that the position I have held in your Administration has been one of great honor. My service to you, to our country, and to our Air Force, has given me more satisfaction than anything in my life.

When I came to Washington in January 1953, I disposed of my private interests in a manner in which I was assured was completely acceptable to the Senate. I divested myself of investments which represented a long career in business. I did this gladly, as many other men have done, for it was an inspiration to me to be found worthy of assuming the office I have held.

The recent unfortunate and I believe distorted publicity given to my continued association with a management-engineering firm has been a matter of deep concern to me. Before the Senate confirmed me, it agreed to my retention of this interest. I am clear in my mind and conscience that my actions have been within the bounds of ethics. This connection has never influenced me, or interfered in the slightest with the discharge of my responsibilities as Secretary of the Air Force, and I have never used that office to further its business. I have done my utmost to observe the high standards you have set for your official family. For the past two-and-a-half years, I have devoted my untiring efforts and energies to the task of building up the greatest Air Force in the world. I hope and believe that my efforts have met with some measure of success.

It has been my privilege to serve under the greatest President of my lifetime. Permit me to express my deep admiration for you personally, and my thanks for all the kindness and consideration you have shown me throughout the time I have held office.

Sincerely,

H. E. TALBOTT

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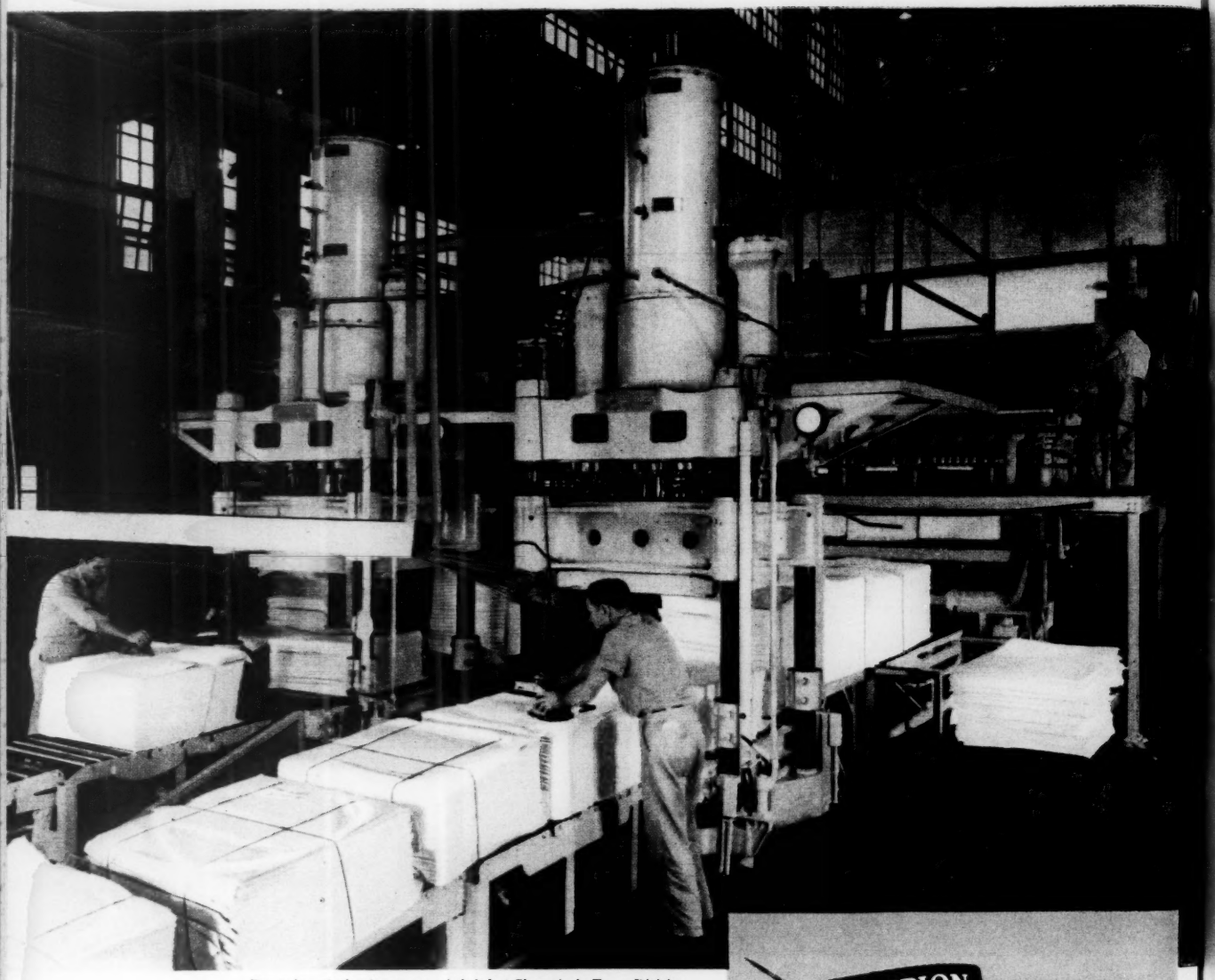
CHAMPION Sets the Pace in Papermaking

d'Arazien



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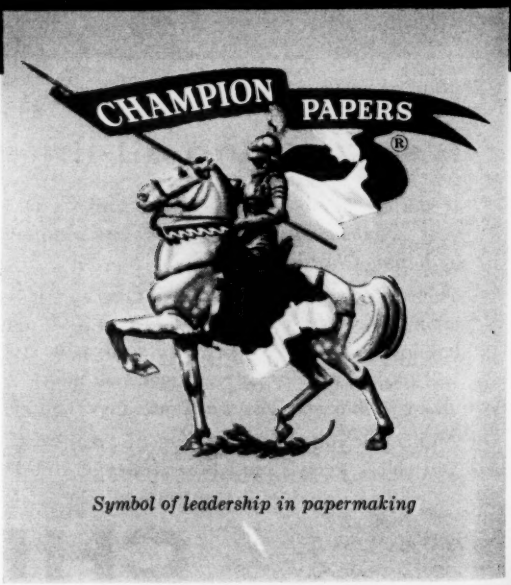

Symbol of leadership in papermaking

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IN YOUR PERSONAL PLANNING

24th and N Streets, N.W.
Washington, D.C.

A warning by a congressional committee about sharp practices in sales of life insurance to servicemen has people upset. This to straighten things out:

INSURANCE FOR SERVICEMEN. The House Armed Services subcommittee, in hearings just ended, has told the Defense Department to crack down on abuses that have cropped up in insurance sales to military people. Involved are life insurance policies sold by private companies--not the $10,000 indemnity benefit the Government issues to all servicemen. Chief complaint is against fly-by-night outfits and glib, overzealous salesmen.

PAYING PREMIUMS. Under a special rule, private insurance companies can send agents to military bases in the U.S. and abroad to sell policies. Service personnel buying them can--if they want--have the monthly premiums deducted automatically from their pay checks. The payment plan has been used by some agents to imply that the Defense Department approves the insurance. Fact is, it's up to the individual to check on how good the policy is.

LAPSED POLICIES. Trick clauses in policies written by fly-by-night companies aroused particular congressional ire. Also, inexperienced salesmen who sold insurance ill-suited to the buyer's needs. And fast-talking agents who glossed over policy shortcomings or took in the unwary with high-sounding claims. Servicemen, later waking up to what they had really bought, let policies lapse--thus insurers pocketed quick profits, buyers got little or nothing for premiums paid.

Shady companies, of course, are in the minority. And the Defense Department has taken steps against a number of agents. But the House subcommittee wants further crackdowns, also suggests that individuals buy with eyes open.

BACK TAXES. People who fall behind in their income tax payments can expect the federal tax collector to be tougher now. Steps taken by the Internal Revenue Service, top tax man T. Coleman Andrews says, provide a more efficient means of checking up on delinquent taxpayers and collecting what they owe. Mr. Andrews says he's disturbed by a rise in overdue tax bills of people who at the same time are going out and buying a car or TV set on installments.

SOCIAL SECURITY. A U.S. district court in Philadelphia upsets an important Social Security restriction on work arrangements you can set up to help someone earn a Government old-age pension. There is nothing in the law, the court says,

(over)

that prevents one person from hiring another "to perform even useless services" just to make that employe eligible for Social Security coverage.

Case involved an elderly woman who quit her job to care for her ailing husband. She applied for Social Security benefits, but found she lacked enough credits to qualify. So she got her former employer to "hire" her and pay her while she continued to care for her husband. When the Social Security Administration held this arrangement wasn't permissible, she appealed to the courts.

Go slow in relying on the case as a precedent. It is likely to be appealed.

CAFFEINE. Tests made by the chemical laboratory of the American Medical Association turn up these conclusions about caffeine in coffee and tea:

It isn't possible yet commercially to make completely caffeine-free coffee.

Per cup, instant coffee has only half as much caffeine as regular coffee.

Decaffeinated coffee has about one third as much caffeine as regular coffee, and instant decaffeinated has about one fourth to one eighth as much.

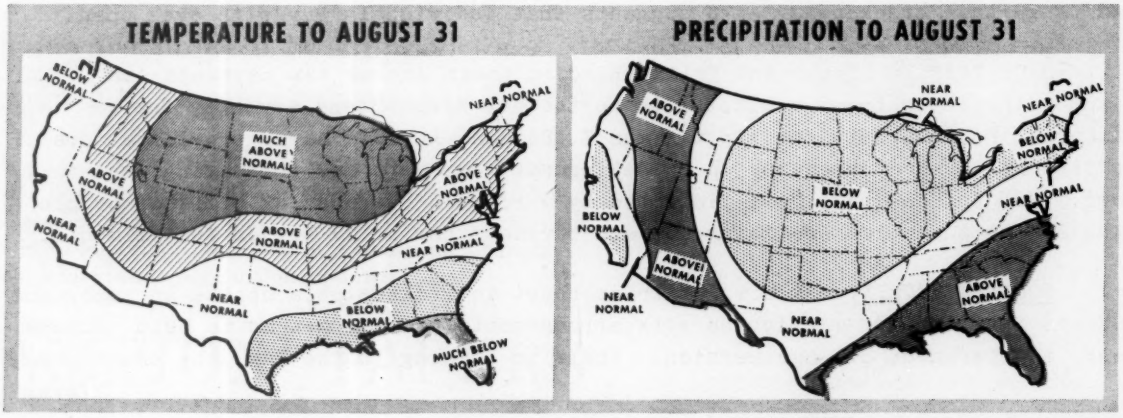
Black tea can have as much caffeine as coffee, but, as usually brewed, contains only 65 per cent as much. Green tea has less caffeine than black.

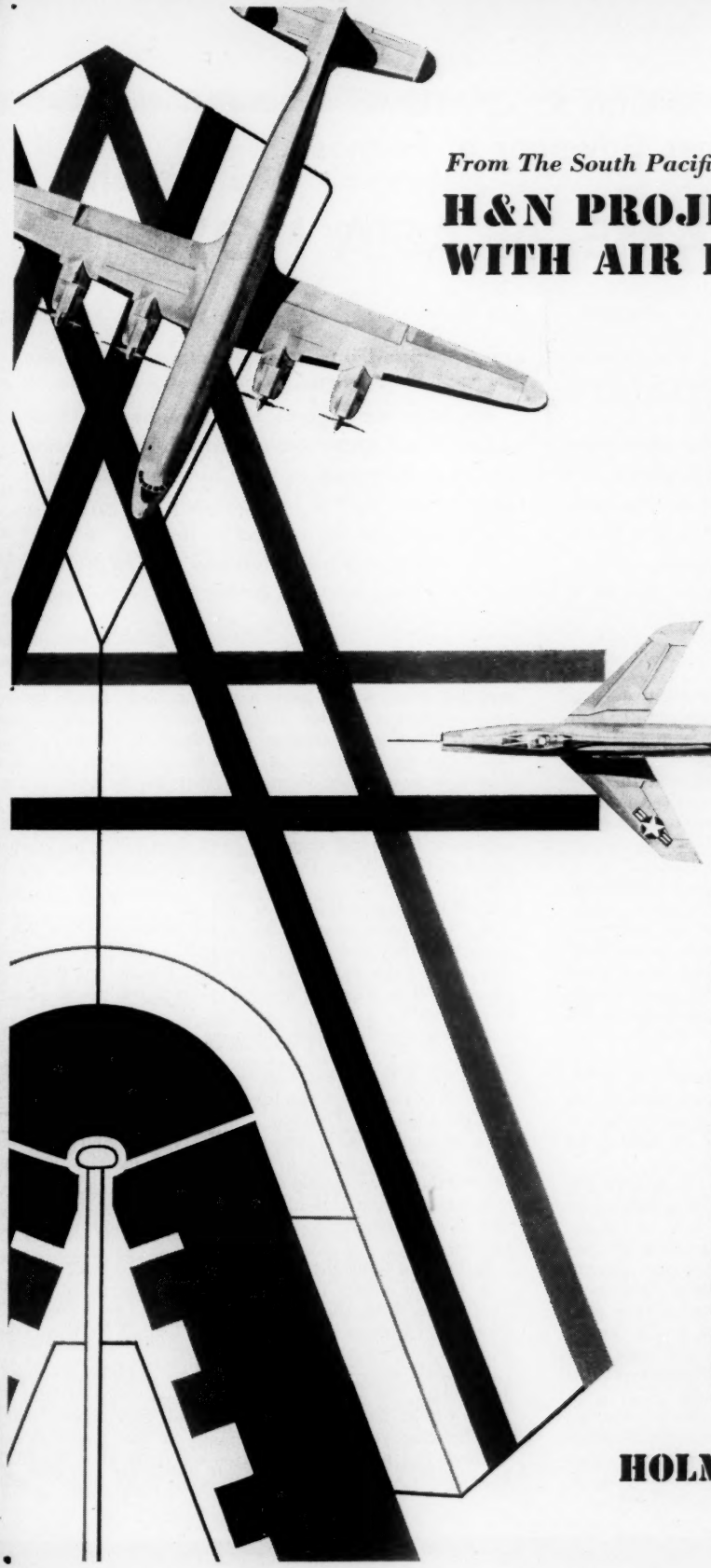
WAR CLAIMS. Here's another deadline on claims against the Government by World War II victims: Those who had bank accounts or other credits taken over by the Japanese in the Philippines must file for repayment by Aug. 31, 1955.

POISON IVY. An experimental vaccine to immunize a person against poison ivy looks successful in tests at the University of Pennsylvania. Skin specialists there report that the shots have been tried on about a thousand volunteers --reducing sensitivity in every individual and producing complete immunity in some. Work on the vaccine was sponsored by the armed forces.

HAY FEVER. Pollen floats afar--thus, local weed-clearing programs are of small benefit to hay-fever victims. So says a new booklet of the American Foundation for Allergic Diseases. The booklet, "Hay Fever and What You Can Do About It," also has a chart rating areas on ragweed pollen, chief hay-fever agent. Price: 10 cents. The Foundation's address: 274 Madison Ave., New York 16, N.Y.

WEATHER. The weatherman, in his 30-day outlook on which the maps below are based, sees a continued hot, dry spell ahead for the East and Midwest:





From The South Pacific to The Continental U.S....

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Interview with K. C. WU
Former Governor of Formosa

REDS' GAME IN ASIA NOW

A Chinese statesman who has called the big Communist plays in advance tells here what the Reds are up to in Geneva.

K. C. Wu, former Governor of Formosa who broke with Chiang Kai-shek, predicted the Reds' "peace offensive" last winter. He foresaw talks over U. S. prisoners, too, and a Communist move to calm down Formosa.

What is Red China up to now? Is the U. S. being trapped into a deal? What will be the next move, once Geneva talks are over?

Mr. Wu, who gives his answers on these pages, is an American-educated Chinese who rose to prominence in the Chinese Nationalist Government before his split with Chiang. He is now living in the United States.

Mr. Wu's previous interview was in the Feb. 4, 1955, issue of *U. S. News & World Report*.

Q Mr. Wu, last January, when we interviewed you, you predicted for us that the war scare would evaporate, that China wouldn't fight the United States. Do you still feel that way?

A I feel that way now, and I also said at that time that the condemnation by Communist China of those 13 American prisoners as spies was just to try to bait you into negotiations.

Q Do you think they have succeeded?

A I think they have succeeded.

Q Now they have released 11 of the 13, the 11 American airmen—

A That's exactly what they would do, because now you have authorized Ambassador Johnson to talk with their man in direct negotiations [at Geneva]. When you started that, naturally they had no reason to hold your airmen any more. Besides, Secretary of State Dulles announced that you would talk about the repatriation of the American civilians, and also "other matters."

Q What do you construe those "other matters" to be?

A What they want is to have you withdraw your Seventh Fleet from Formosa and any other assistance you give the Nationalist Government. They will insist that Formosa is an internal matter with them.

You see, at the beginning of this year—at the time of my interview—there was so much talk about war—a possible war—between the United States and Red China. And, of course, the Communists wanted to go ahead and make their usurpations and subversions in Southeast Asia, and they figured that, in case they did anything more in Southeast Asia, there would probably be war between your country and Red China. They fought in the Korean War. Then, in the case of the Indo-China war, you remember that at one time your Government—some of your Government spokesmen—almost said that you should go it alone.

And then there was Formosa. As soon as they announced the "liberation" of Formosa, you made this mutual-defense pact there. So they figure now, in case they really go further into infiltration and subversion in Southeast Asia anywhere, probably they would have a war on their hands between your country and Red China. Furthermore, they realize that, if there were another war, there would be no sanctuary like the sanctuary of Yalu. So, therefore, they figure that it is a very big thing and that the hazards are very great.

Their method is always to fight and negotiate, fight and negotiate, fight and negotiate, and then kill. That's what I said last time. When they are sure they will win, they will kill.

Q What do you think they will do?

A They figure that by the peace offensive they will get everything they want. At the "summit" Conference at Geneva they started this big peace offensive. Russia and Red China all co-ordinate together and try to give the peace offensive to the world.

Q Now, by this peace offensive, what do they expect to get?

A First, I think they will expect, before the year is over, they will at least force you to agree to the abandonment of the offshore islands of Quemoy and Matsu. They will say: "We have no quarrel with you—with the United States. Formosa is our domestic problem. We have to liberate Formosa." That's what Chou En-lai said only the other day.

I think by the end of the year they want to force you and the Nationalist Government to abandon the offshore islands.

Q Do you think the islands will be abandoned?

A I think it very likely that it will progress in that way. That's one thing they want to gain. I'm not speaking yet about Red China's admission to the United Nations. I want to speak of their territorial gains first.

The next step—in July, 1956, there will be elections in Indo-China. In Geneva last year it was agreed that elections would be held next year, and they figure that by not fighting you—just by keeping on the peace offensive—where you have agreed to free elections, they figure they have put you on the spot. For, even if all South Vietnam

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Timetable of Conquest: Offshore Islands in 1955 . . . Indo-China in 1956 . . . Indonesia Next; Later Formosa

voted as one man against Communism, they would still be in a minority.

Q Why are they in a minority?

A Because the population of North Vietnam is much greater than Southern Indo-China.

WHEN VIETNAM VOTES—

Q In other words, North Vietnam would win, and the Communists would win the election?

A Precisely.

Q So they already have that in the bag?

A Yes, they have that in the bag. And in case it is not agreed to have a free election, the world will place the stigma on your side.

Q On the West?

A Yes. They will say: "You have agreed to it—now you don't want a free election." France is probably willing to agree to the free elections. Ngo Dinh Diem, the South Vietnam Prime Minister, may not agree. In case Ngo Dinh Diem does not agree, then the Communists can go back and say, "If you don't agree, we will have to fight—to use war." And, of course, the West cannot step in, because then the West has violated its own word. So it is their plan to get Indo-China next July.

Q After they get Indo-China, then what?

A By this peace offensive there is another objective—Indonesia. They already have a Communist Party organization there which is the only effective party organization in the whole of Indonesia. They already have 20 per cent of the vote. So in case the Reds get the offshore islands of Formosa and also Indo-China, that will help tremendously the Communist Party in Indonesia. They may be able to take Indonesia by peaceful means. That's their third scheme.

Q What about Formosa all through this period?

A Well, they figure they can get all these things without a war. That's why they want a peace offensive, starting from the "summit" Conference. In Formosa, I think you will discover—as I outlined last January—their plan is first to get the offshore islands, to get you to negotiate. Then they probably will get Red China admitted into the United Nations.

Q You expect them to get Red China admitted?

A I think they will try to.

Q Do you think our country will agree to that?

A I think in the coming September it is very likely. Suppose, now, that France goes ahead and recognizes Red China —and suppose the other nations do—they're inclined to be all sweetness and light, you know, with the release of the 11 prisoners. Although the Communists shouldn't have detained them and condemned them in the first place, there is a sudden change of feeling—there is a sudden feeling that maybe the Reds are not so bad at all. By the coming September, when the United Nations will meet, I think a movement will be made to get Red China admitted.

Q Will that mean the abandonment of Formosa?

A I'm afraid that's the tendency, that's why I want to warn. Everything on their part is coming out just the way I said it could.

Q How do you think they will get Formosa?

A On their timetable it will probably be after Red China is admitted into the United Nations, and after they get the offshore islands. Of course, they will keep on demanding the withdrawal of the Seventh Fleet, and they will threaten to liberate Formosa anyway. They will say they don't want to fight you, but that Formosa is a domestic problem. Then, as I outlined before, somebody like India will come forward, and say: "Maybe it's better to have a United Nations trusteeship."

The Reds will not agree, still—they will only agree, as now, that "Formosa is part of our territory, Chinese territory, therefore we cannot agree to the trusteeship."

Then probably somebody will come forward with the idea for a United Nations trusteeship over Formosa, with the major participation of Red China.

Q What will happen then?

A They still will not agree. But then probably somebody else will come forth with the proposal for an understanding—a secret understanding—that, after a certain number of years, after this trusteeship business, Formosa will be returned back to China.

Q Is there any chance of the solution that they call the "two Chinas"?

A No, because Red China will never agree to that. They will keep on threatening, saying that the whole tension comes from your country, from your Seventh Fleet.

Q Do you think we will lose all our military bases on Formosa if there is a trusteeship?

A You will not only lose all that, but the Reds will win Indo-China, they will win Indonesia, and they have plans to take over in Singapore and Malaya now.

LAST TO GO: PHILIPPINES—

Q What do you think will happen to the Philippines?

A The Philippines, I think, will come last.

Q But you think they will eventually get them?

A I think so, but their plans are for Southeast Asia, outside the Philippines, first.

Q But do you think their aim is to get the Philippines also?

A I think that they consider the Philippines not so important. Japan is much more important.

Q Do you think they think they can get Japan?

A I think they are now probably spending more money and using many more agents to infiltrate into Japan than anywhere else.

Q Why do they want Japan?

A Once Lenin said—they are supposed to be Lenin's words, you know, but I haven't come across them anywhere —Lenin said that, in order for Communism to conquer the whole world, they need three things: They need German

(Continued on next page)

. . . "If Japan goes Communist, South Korea is gone"

science, American capital, and Chinese manpower. They've got the manpower now. They got the German scientists, I think, after the war. By adding Japan to it, they get more industrial production over there, in Asia.

Q What about Korea?

A Well, the Communists will leave it in a stalemate.

Q But if they get Japan—

A They consider the best way for the next five years—in case the peace offensive goes off, Japan will be more likely to come to them by internal infiltration and subversion.

Q They may get Korea that way?

A They probably will get Japan first. In case Japan goes Communist, South Korea is gone, naturally.

Q Do you think they will wait, thinking if anything happens to President Rhee of South Korea they will be stronger?

A I don't know. You see, there they have a problem. If I were President Rhee, I would try to give the South Koreans such a good Government that they can get a good successor after me. I would do that.

APPLAUSE FOR IKE'S PLAN—

Q You wrote us before the Geneva Conference that you doubted seriously whether the West would approach the Conference "at the summit" with a program that can wrest the initiative from the Communists—

A But I am quite enthusiastic about President Eisenhower's program.

Q Why?

A I am very enthusiastic about two points he made. One is the lifting of the Iron Curtain. The other—of course, it is a dramatic proposal and should be backed up by more—is the disarmament plan, with aerial inspection. I think those two are very important—much more important than German unity or a Formosa cease-fire and all that. I'll tell you why.

We just have to find whether the Communists are really sincere or not. If they are sincere in the peace movement, why shouldn't we—even me, an anti-Communist—if they really want a chance, why shouldn't we give them a chance? Now we have to find out whether they are sincere or not. If they are not sincere, then we may be tricked again.

Those two things—the lifting of the Iron Curtain and the disarmament plan with inspection—are really good points.

Now, if we consider Communist power, why have the Communists been so successful? That's a very important question for us to answer first. You see, in order to make peace with an adversary, we have to know the nature of the adversary. Why have they been so successful? Is it because of the Communist ideology? No. We can study the party from the time of Lenin and then Stalin—ideology does not mean a thing to them now.

Is it because of their military power? It is not because of their military power. Yes, they have tremendous forces, but, you remember, when Marshal Tuchachevsky was purged in one year 357 generals were purged, and 3,000 officers were purged. If the Army were really the power behind the throne, the Army would not have the purges.

Is it, then, because of the secret-police control? No, it is not. In the history of Soviet Russia the four secret-police chiefs have been successively liquidated.

Q What is really the power that makes Communism work?

A It is the Communist Party organization. In all the world it is a funny thing—nobody has ever written a book about the Communist Party organization—the structure, the cells, how the cells are controlled, how the people are trained. That's a topmost secret.

I have found through my own experience the party organization—of course, I cannot go into the details now. But, anyway, that's the reason they have the Iron Curtain. They cannot allow people with ideas of freedom to infiltrate behind the Iron Curtain and then affect their system. You see, their system is an absolute denial of freedom. That's why they have to have the Iron Curtain.

So in case they really lift the Iron Curtain—not with a few exchanges of farmers or officials, but lift it so that the people can move anywhere, as I can move around in your country, anywhere, and talk with anybody and tell anybody my opinions—if they really accept that, then that means they will have to accept a change of their system. Otherwise, their system will be threatened. So far, infiltration and subversion is one way. But in case they lift the Iron Curtain, then everybody who travels in Russia becomes an agent for infiltration and subversion.

Q Going back to Formosa, do you feel that the United States is wrong in giving support to Chiang Kai-shek?

A I think it is right—it has to. That comes to my point: I believe that the United States Government should support the ideas advocated by President Eisenhower, to find out whether Russia is sincere or not. So, therefore, you should advance those two questions: one, the lifting of the Iron Curtain, the other, disarmament, complete with inspection. If Russia accepts that, then you can yield in other places.

If Russia does not yield on those two things, or just gives lip service on them, then there is no use for you to yield anywhere, because it means the Communists are not sincere.

FUTURE OF FORMOSA—

Q What do you think is the solution for the Formosa problem?

A It would be difficult for me to say that peace is not possible. Everybody wants peace now. If anybody comes out and says that the Russians are not sincere, that they are just trying to lull us into complacency, then people will say, "You have your own self-interest" or, "You are a warmonger." And that's bad. That's why the Communists use the psychology of this country, and they go for those things. But I don't believe in your yielding anything to them, either in German unity or Formosan cease-fire, unless they have shown their sincerity.

Q Do you think there ought to be a free Government in China before we give up Formosa to China?

A If you say that, they will probably argue with you now that their system is quite free.

Q If the Red China Government was a free Government like ours, would you believe that Formosa should be a part of China?

A Then there would be no use fighting.

Q Formosa, then, should be a part of China?

A If it is free.

Q If the Communist mainland is free?

A That's right. But they are not free.

(Continued on page 82)

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In bicycle manufacture, the race is to the swift. It takes smooth, high speed production methods to produce the best—*profitably.*

This was the problem of one of the world's leading bicycle builders. An important operation involved punching 36 spoke holes simultaneously in every wheel rim. To lubricate the punches and dies manually, a cover had to be left open. Dies and punches were blocked by accumulating scrap. Wear was such that they had to be replaced once a week. The cost on all four machines used in the operation ran into $20,000 a year. Punching those rim holes was making a sieve of the budget.

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. . . "Reds make crises, have own solutions beforehand"

Q But what do you think will be the impact on the people of Formosa if the Allies begin to yield on the offshore islands?

A I think it is very bad now. It is going to demoralize the Nationalist Government on Formosa, and it's going to work to their downfall—their moral collapse, the collapse of the prestige of everything—and will lead also to the collapse of your prestige in the Far East.

Q Do you think at some point the Red Chinese will attack Formosa?

A I think so. I think they will keep on saying they won't attack unless you have given them some kind of understanding that you will not try to help defend Formosa.

Q If they thought they were going to fight Chiang alone?

A They would do it.

Q Do you think the Nationalists can defend themselves successfully against attack?

A Not with the present morale.

Q And not unless they knew they had the moral support of the United States?

A That's right.

Q Do you think that China was lost to the Communists because moral support of the United States was not forthcoming?

A There were many reasons, but that was one of them.

REASONS FOR CHIANG'S FALL—

Q Do you think the United States indirectly was responsible for the fall of the mainland of China?

A There were four parties, I should say, responsible. One is Soviet Russia—Soviet Russia gave the Communists assistance, especially by handing them the equipment and supplies stored by the Japanese Army in Manchuria.

Second, your Government—your Government failed to see the nature of the Communists. At that time you thought they were agrarian reformers, and all that. Then, of course, you took a sort of hands-off policy.

The third thing was the Communists themselves—the fight-negotiate, fight-negotiate business, as I explained.

And, fourth, is the Nationalist Government, of which I was a part. We were so corrupt and incompetent at that time in many ways that we lost, in effect, the faith and confidence of the people. Those are the four points.

Q Do you think there is such a thing as a public opinion in China?

A Even now, I think so. Public opinion is what everybody feels but doesn't dare to say.

Q Do you think if they had leadership they could overthrow the Government?

A Not with leadership alone.

Q What else do they have to have?

A They have to have a sort of invasion from without to help them. In any Communist state, any police state, now, it is very difficult to have an uprising from within. There has to be a leader from outside, and that leader should come from the Chinese in Formosa—not from you.

Q Do you think that Chiang is effecting reforms in his Government?

A That's the trouble—that's what I told you last time.

Q Do you think he is making any changes in that direction?

A He has not made sufficient changes to be able to rally the people around him.

Q Do you think, if he would do that, he would be able to rally the people?

A As I told you in the last interview, I advocated six reforms for him—in case he adopted those six reforms, I think he would.

Q Is it your impression that Asia remains the big battleground of the struggle between Communist and non-Communist forces?

A Exactly. I believe the same thing—I have not changed my view. The only thing is I think now all the events indicate what I said last time is beginning to come into shape.

Q Do you think by so-called "peaceful" means the Red Chinese will get about what they want?

A Yes—not the Red Chinese, but the Communist International. They will get Southeast Asia.

Q Is there any chance, in your opinion, of Red China's ever breaking away from Moscow?

A There is no chance for that because of the party-organization business again.

WHY TITO COULD PULL AWAY—

Q We've often heard it said that if we would play up to Red China they would break away from Moscow.

A Yes, but here is the question now: Has the West ever come to understand why Tito could break away?

Q Why could he?

A It is because Tito was given the rarest chance in the world. From 1941, after the Germans attacked Russia, until 1945 Tito had five years when Russia was so busily occupied with the war with Hitler that Tito had all the time to build up an independent party machinery within Yugoslavia. But no other satellite has ever had that chance, including China.

Q Why do you think the Communists are making all these gains in the world? Is the West unable to understand that technique?

A That's right—the West is unable to understand.

Q Is it because the West is so anxious for peace it is ready to yield—do you think it is peace at any price?

A In China we have a proverb which applies to this situation. In China we say, "A gentleman can be deceived by his own beliefs and by his own methods."

You see, the West, the free world, with the best of its statesmanship can only anticipate crises—sometimes we even fail to anticipate crises—but today the Reds manufacture crises and have a sort of craft to help their own ends. They have their own solutions prepared beforehand.

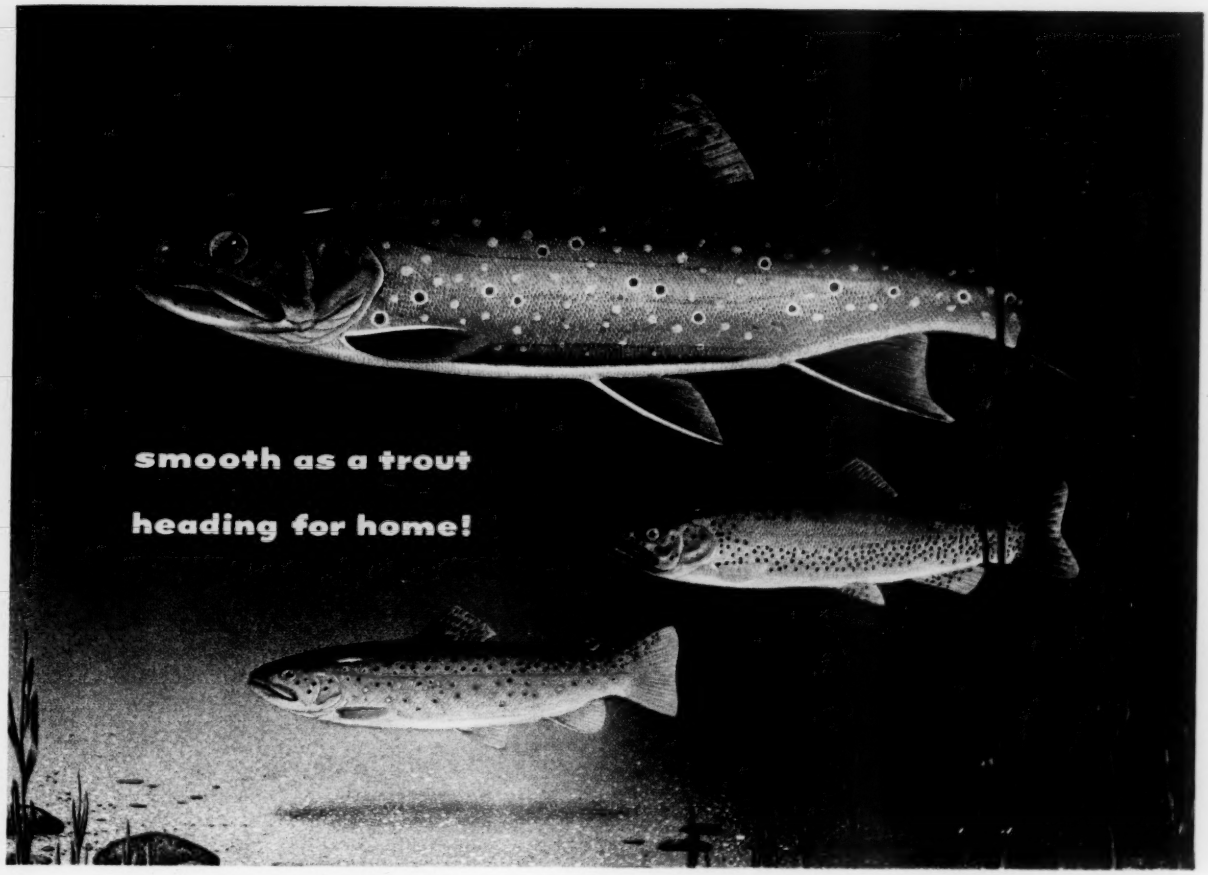
Q Do you think they win the battles in the court of public opinion?

A I think even now, for instance, they are putting forth that they are the peacemakers. And they are, when you look at it in the matter of propaganda.

I think the whole point is the free world has to let President Eisenhower follow up with those two ideas—disarmament with inspection and lifting the Iron Curtain. Talk about those two things first before you yield anywhere else. Otherwise, they are not showing their sincerity anywhere and any movement is to our own loss.

Q Where do you think you will fit into this picture—will you ever go back to China?

A I don't know, but as long as the Communists remain as they are now—denying freedom, denying free elections, denying personal individual liberty—I will fight them.



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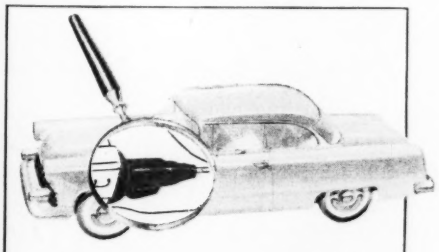

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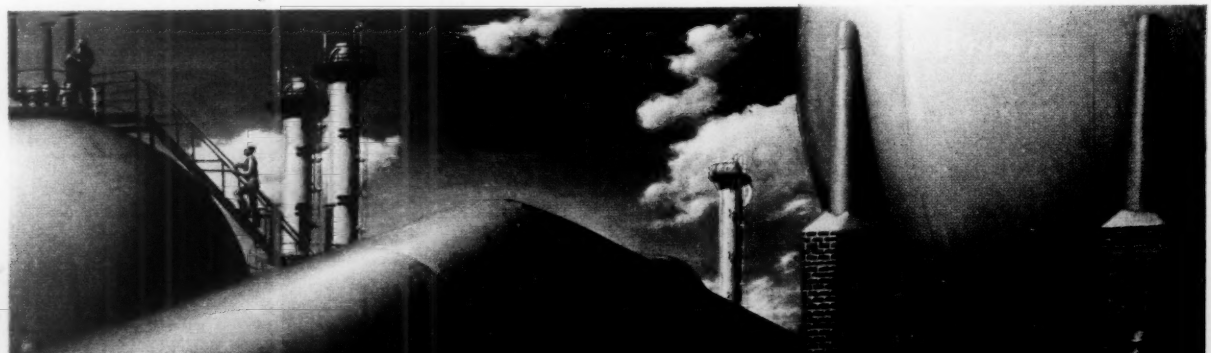

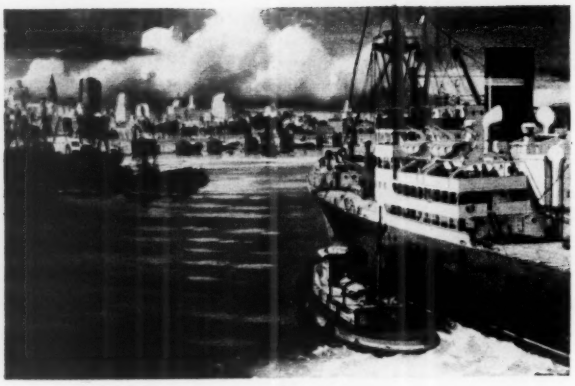

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PLUS & MINUS
Latest Indicators of Business Activity

Business activity in the U. S. and abroad continues to rise as the free world enjoys an unprecedented degree of prosperity.

Department-store sales in the U. S. soared to 126 on the Federal Reserve index in July, up 6 per cent from the previous month and 11 per cent above July, 1954. Hot weather helped sales, and consumers spent freely from their rising incomes. There was a huge demand for room air-conditioners.

Carloadings on U. S. railroads were 16.4 per cent above a year ago in the week ended July 30, the second-widest margin of gain this year.

Construction activity held at a rate of 42 billions per year in July, up 12 per cent from a year ago.

Industrial production the world over has been making spectacular gains. As the top chart shows, the U. S. level is more than 150 per cent above 1937-38. Output of the rest of the free world is two thirds more than in 1937-38.

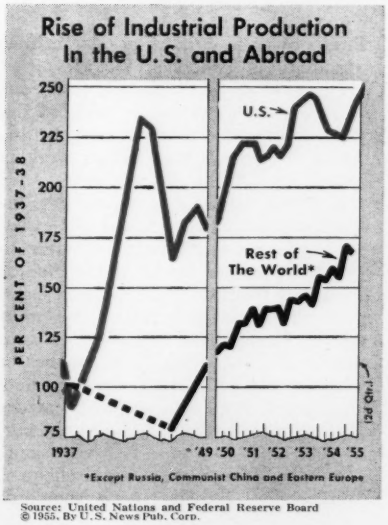
Europe's gains are continuing. They are fastest in Germany, Great Britain, France, the Netherlands and Belgium.

World trade is thriving. Europe is importing more freely, spending more of the gold and dollars it receives. Germany, Britain, Sweden and the Netherlands have eased their controls over the use of dollars and are making sizable purchases in this country.

U. S. exports are likely to rise about 1.5 billions this year over last. Imports are due to increase about a billion. Shipments from the U. S. include machinery, metals, autos, farm commodities.

Farm products exported from the U. S. amounted to 3.1 billions in the year ended June 30, 1955, up from 2.9 billions the year before. The U. S. Government is seeking new ways to speed the outflow of cotton and other surplus farm commodities.

Fear of depression is fading in Europe, as it has in this country. Population is growing faster than before the last war, markets for autos and household appliances are broadening. Governments are confident they can use their powers over money, credit and taxes to keep slumps small.



Source: United Nations and Federal Reserve Board
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Industrial use of raw materials has expanded greatly, in the U. S. as elsewhere.

U. S. steel mills scheduled operations at 94.4 per cent of capacity in the week ended August 6 up from 90.7 the previous week. Tonnage was 50 per cent above a year ago, low point of the recession. Backlog of unfilled orders is still increasing.

Steel scrap, a barometer of conditions in the steel industry, bounded up to $43.33 per ton, up $1.83 in a week and $6.83 in the past month. Demand from Europe lifted U. S. scrap exports in the first half of this year to a tonnage exceeding that for all of 1954.

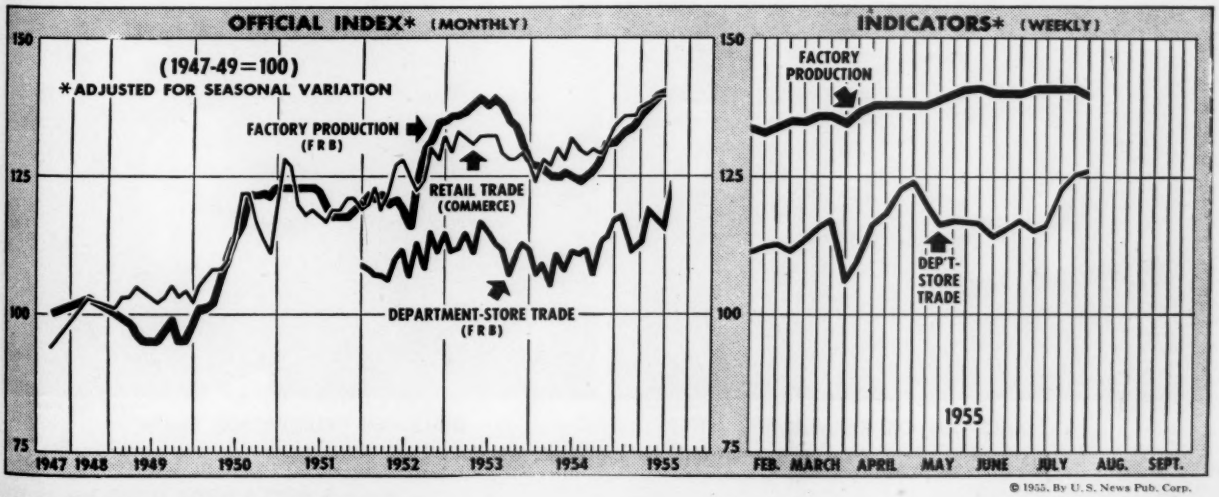
A shortage of copper has developed as a result of strikes and heavy demand. Prices of copper scrap have been rising. At 36 cents per pound, refined copper is up 6 cents since January 1 and compares with 45 cents on the London Metal Exchange.

Nickel and aluminum demand is strong. The U. S. Government has diverted another million pounds of nickel from the stockpile to private industry. A major U. S. aluminum producer is launching an expansion program to increase its output by a third.

Rubber consumption reached a record 136,046 tons in June, 1955, 22 per cent above a year ago. The U. S. price of natural rubber rose to 45 cents per pound on August 2, up 10 cents this year.

Business firms, meanwhile, are trying to increase inventory. Stocks rose to 78.8 billions on July 1, up 400 millions from June 1, nearly 2 billions since February 1. The ratio of stocks to sales is the lowest in 4 years.

Spending for plant and equipment, as well as inventory, is rising. Larger business spending is good insurance that business activity will hold and extend its gains of the last year.



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WHERE AUTOMATION IS IN TROUBLE

Britain Tries It but Runs Into Snags

The average British worker, geared to a slow production pace, is taking a dim view of latest production methods. Automation isn't taking hold in Britain as it is in the United States.

There is a deep-seated fear that new machines will bring on unemployment. Featherbedding rules aren't easy to change. Many employers, too, feel that the old ways are better.

LONDON

Britain is turning to new push-button methods of producing goods, but is running into opposition every step of the way. Automation, looked upon by many as providing a real chance for this country to raise her living standards, is getting anything but enthusiastic reception.

In Britain, as in the United States, automation is the word applied to the development of modern mechanical devices for factories, shops and mines. It is a word, however, that is viewed with fear and distrust by many British workers and some businessmen. Years of union featherbedding and restrictive practices, and long-standing resistance by management to change, are making it difficult for automation to come to this country at a time when Britain is striving for a greater share of the world's market for her goods.

Productivity in Britain lags far behind productivity in American factories. The U. S. worker, it is estimated, turns out two to five times as much work as the British worker. One reason, says a British industrial expert, is that British workers give only two thirds of their best.

Need for greater output. Yet increased productivity is viewed by economists as the one way Britain can maintain her position in the world in the face of growing competition from Germany and Japan, and at a time when she must compete for markets against her own Commonwealth nations and colonies.

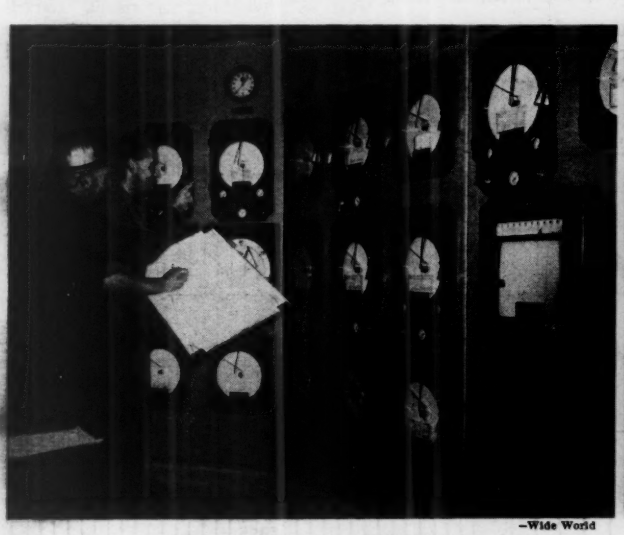
The view is held by many persons here that, unless automation is allowed to develop without hindrance, Britain's current prosperity will not last very long. R. A. Butler, Chancellor of the Exchequer, has plans for doubling living standards in 25 years, but is running into the traditional tendency of the British worker not to overexert. Even without this tendency, the country's labor force will not be large enough to reach a 100 per cent increase in living standards unless there is a higher productivity rate in the years ahead. Officials estimate that the British labor force will rise only 1 million in the next 25 years, from 23.3 million in 1954 to 24.4 million in 1979.

Mr. Butler is aiming for a 110 per cent increase in the gross national product. To achieve this, production per man-hour would have to rise by 123 per cent in 25 years, or 3 per cent a year. The rate of increase over past years has been only 1.5 per cent a year, or half of what is required to reach the Butler goal. Economists agree that new production techniques must fill the gap left by a labor force that is growing too slowly.

It is against this background that Britain is turning to automation.

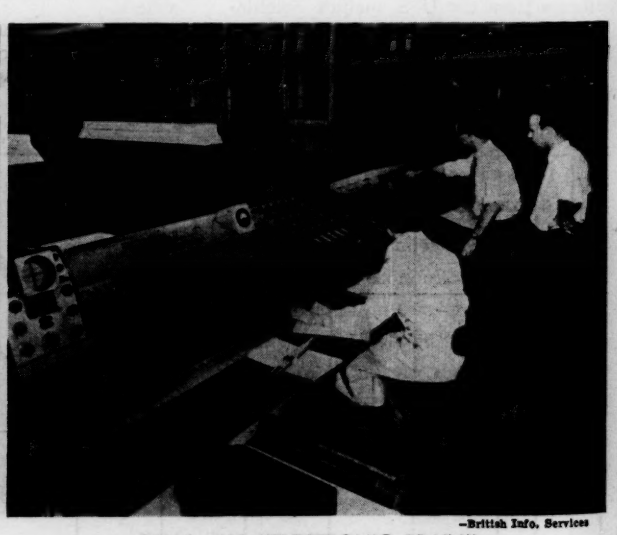
You can see some automatic factories already in operation. The Esso Petroleum Company, in a new 112-million-dollar refinery, employs six men to operate distilling units that process 5.5 million gallons of crude oil a day, nearly a third of the country's domestic consumption of oil products. At Coventry, the Austin Motor Car Company is cutting labor costs by producing cylinder blocks on modern transfer machines.

A London teashop chain is using a set of electronic computers to figure payrolls and to analyze the trend of bakery orders. A $140,000 electronic brain was used by the British Broadcasting Corporation to calculate the voting trend in the 1955 election. In one insurance company,



—Wide World

DIALS—AN OIL REFINERY



—British Info. Services

DIALS—AN "ELECTRONIC BRAIN"

Workers are afraid the machines will take their jobs

a single accounting machine has replaced all but 70 of a staff of 2,400 clerks.

Fear of loss in jobs. Yet, automation is in its infancy here compared with its state of development in the United States. And, despite surface support for automation by some local Labor Party groups, further development is hampered by fear of the average British worker of anything that might work him out of a job.

That fear has produced widespread featherbedding practices in British industry, and has not been overcome by 15 years of full employment. Even now, there are more jobs than workers in Britain.

On the management side, too, there is a coolness among some employers toward new labor-saving devices. One economist, discussing British attitudes, has this to say:

"The hangover of traditional, long-standing British attitudes on both sides of industry—however justified they may have seemed to their possessors one or two generations ago—is today the greatest single cause of the average, and lower than average, level of performance of British management and organized labor alike. The best British managements and trade-union leaderships have renounced and abjured it. But it is an evil heritage, an encumbrance."

At a recent conference on automation held by the Institution of Production Engineers, a representative of the powerful Trades Union Congress told the audience: "I am practically sure that there is going to be trouble irrespective of full employment, partly because it involves change and change hurts. The fear of change is even more active than change itself."

Demands for controls. Ingrained among workingmen is the fear of machines and methods that replace manpower. In automobile plants, where automation has made the most progress, there are reports of unofficial meetings of shop stewards to plan action against elimination of jobs by automatic machines. In Parliament, Socialists are calling for Government control of these devices. Socialist M. P. Charles Pannell said in a recent debate:

"If automation comes in with the speed which is prophesied in some of the press comments I get from America, the dock strike, the rail strike and the seamen's strike will be as chicken feed compared with the trouble that will be on the shoulders of the Minister of Labor at that time."

These strikes were among Britain's most stubborn walkouts in recent years.

The British worker's resistance to pleas that he work harder to improve his standard of living shows up in many incidents reported in the newspapers. These are typical:

- A tailor was fined by his union for cutting 48 suits in a week, two over the limit set by the union.

(Continued on page 88)

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Milkman's early start brings fine by union . . .

• A bricklayer, ostracized by fellow workers for laying bricks too fast, finally gave up and moved to Australia. He did the brickwork on a Government housing project in 169½ hours, whereas the average time required for such a project is 500 hours.

• In another case, a milkman was fined by his union for starting his morning rounds too early. He had the idea that he could get more customers if he beat the 7:30 a.m. deadline.

• A coal miner named Alan Bulmer finished a coal-cutting assignment three hours ahead of fellow workers and started on a second stint, earned an additional $4.20 a day. Other miners objected so much that he was downgraded by the union for three months. Mr. Bulmer reacted with these words:

THEY MAKE MACHINES . . . but fear machinery

"It is all very stupid. I have always believed in a man doing a full day's job for a full day's pay. There are too many people about who want to draw big money and do as little as possible for it. My aim was to study and work hard so that one day I could become a pit manager. Now there's this trouble." He finally quit and went out to hunt employment in another industry.

• A Government agency, studying productivity in the building trades, came to this conclusion: Of the total time for which bricklayers were paid, 25 per cent was consumed in unavoidable delays, 50 per cent was spent in "voluntary pauses"—late starts, early finishes, extended meal and tea intervals. That left

. . . Produce more or tighten belts, Britons are warned

only 25 per cent of the time for laying bricks.

Such attitudes toward work on the part of the average British workman generate newspaper headlines like these: "The British—Are They Lazy?" and "Why Don't the British Work?"

A national magazine concludes that the only solution to Britain's productivity problems is a change in thinking by workers and management. "If they don't succeed," the writer said, "get ready to tighten your belts. If they do, we'll reap the full benefits of the 20th century industrial revolution which new knowledge is bringing about."

The ups and downs of the British economy since World War II, in the view of

—United Press

R. A. BUTLER
. . . automation is his problem

economists, reflect the lag in productivity. Three business setbacks in that period have been dubbed "10 per cent crises"—meaning that they could have been prevented with a 10 per cent increase in productivity. Most employers and trade-union leaders agree that a 10 to 15 per cent increase in efficiency could be achieved almost any time without hardship to anyone.

A mortal fear of unemployment is cited as the real force that is generating apprehension over automation. The *Daily Mirror* tells its readers to beware of "technological unemployment—a polite way of telling a man he has been pushed into the bread line by a robot." Such a warning does not go unheeded by people already schooled in the art of working below their capabilities.

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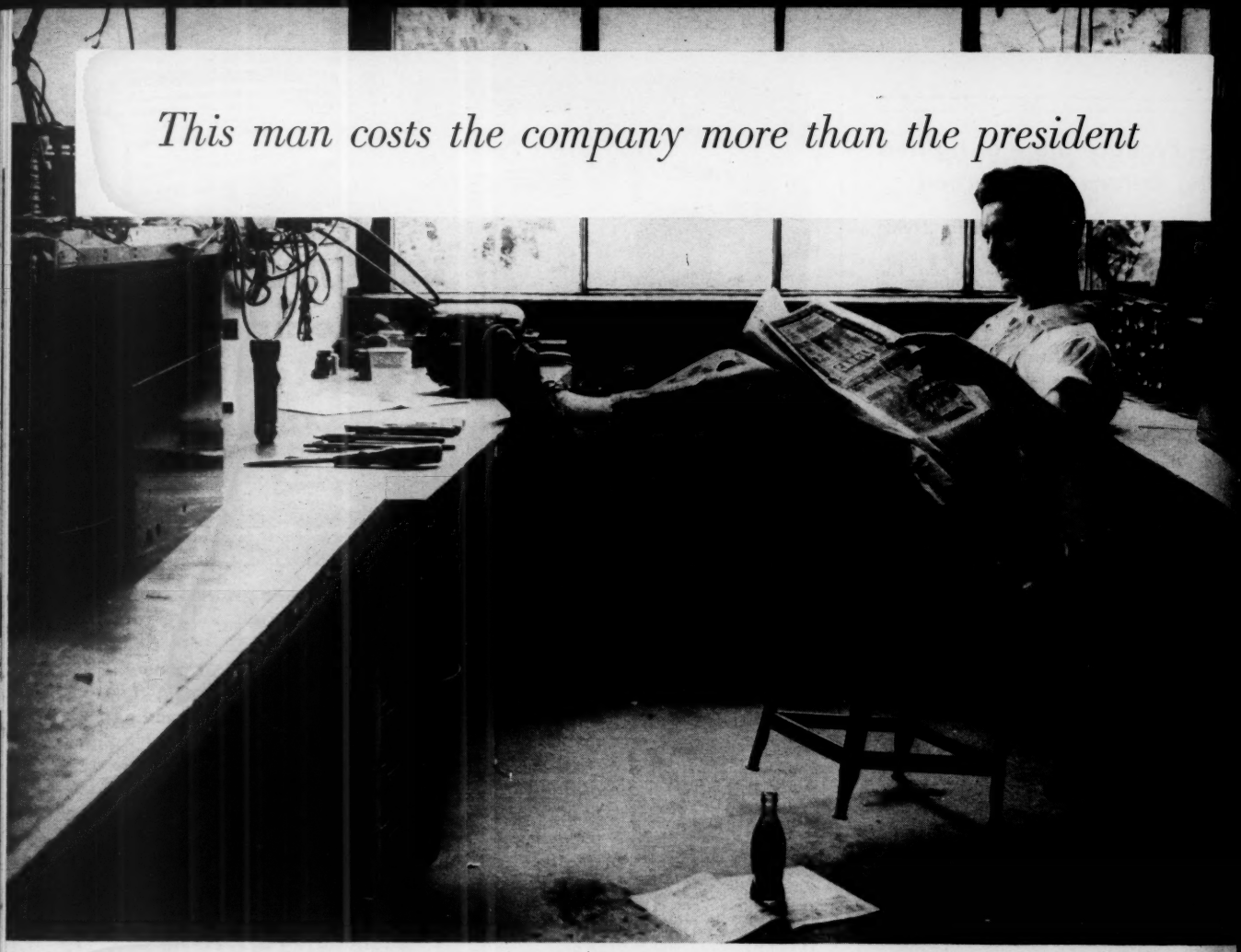

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Under new steps taken by Government to slow the boom:

Discount rate, which bankers pay to borrow from the Federal Reserve Banks, now has been boosted for the second time this year. This interest charge, generally, is what it was in 1953, when Government was slowing a previous boom.

Mortgage terms, where guaranteed by Government, have been tightened. Home buyers are to pay more cash, get a maximum loan of 25 years, instead of 30 years.

Margin requirements, in buying stocks, were increased recently from 60 to 70 per cent and may be increased again.

Interest rates have been allowed to go up, reflecting policy of the Federal Reserve Board in its money-market operations.

To show how the cost of borrowing has gone up:

Treasury now is paying highest rate since September, 1953, for 90-day money.

Finance companies are paying 1 percentage point more for three to six-month money than they paid in June, 1954.

Retailers and other businessmen have taken six increases this year, two within a week, in discounts they pay to raise cash on their installment and other commercial paper.

Investors are buying long-term bonds at lower prices; so yields on high-grade corporation bonds now average 3.08 per cent, compared with 2.87 per cent a year ago. That makes borrowing by companies for expansion more costly.

Federal move to tighten mortgage terms seems a bit strange at first. Official explanation that the housing boom threatens inflation is incomplete, for this boom is slowing already, based on building contracts being signed and homes being started. Here is the real reason for the move:

Seasonal needs for credit in trade, manufacturing, farming and Government normally increase in the last half of the year.

Federal policy is to meet these needs, not try to squeeze business hard, for that could turn boom into recession, which is not wanted. However, the more credit is allowed to grow, the more danger officials see of inflation.

Strategy is to reduce demands for credit in one place where Government can take specific action: in home buying. Hope is to make it easier for Government to hold back on money supply, without denying credit to fill seasonal needs.

Two points support that explanation:

Defaults on mortgages continue small. Government economists do not believe the mortgages made in the last few years are fundamentally unsound.

Banks are taking more interest in mortgages. They accounted for 14 per cent of the rise in mortgage debt in the last 18 months. If, because of new rules, they make fewer mortgages, they will have more to lend to business and Government; pressure on the Federal Reserve to supply funds will be less.

(over)

Builders say the new rules will hamper building and selling of houses, but not until late this year. Starts on new homes in 1955 still are expected to total about 1.3 million, near a record, compared with 1.2 million in 1954.

Government's sway in this field has increased, however, indicating 1956 might see fewer houses started. Programs of Veterans' Administration and Federal Housing Administration now account for 51 per cent of house starts compared with 43 per cent in 1954 and 38 per cent in 1953.

Installment debt increased more in June than in any previous month.

Auto loans accounted for 576 millions of total increase of 765 millions.

Other consumer goods, such as appliances and furniture, accounted for an increase of 84 millions. Personal loans also increased rather sharply.

Rise in debt has been much more than seasonal. June saw consumers making heavier installment purchases than in December, normally the big month.

There is every reason to think consumers would go on spending and borrowing without letup, unless retarded by tighter credit or unsettled prices. This is the over-all impression from a midyear poll by the Survey Research Center of the University of Michigan, which also polls consumers for the Federal Reserve.

Here are highlights from the survey--

The year ahead: Many more families than in a similar poll last October expect their financial condition to improve; few expect to be worse off a year hence. The vast majority--more than in any previous survey--feel the year ahead will be a period of "good times." Apparently, few consumers see need for caution.

The next five years: 42 per cent feel "good times will predominate." Only 15 per cent say "bad times will predominate." The optimists are more numerous than they were in surveys of late 1952, 1953 and 1954.

When to buy: 55 per cent say now is a good time to buy large household goods. That compares with 45 per cent last October, 26 per cent late in 1952.

Prices: More consumers than last autumn expect higher prices for cars, household goods and clothing. Increases are expected to be small.

Houses: Number intending to buy is larger than a year ago. This was indicated before Government moved to tighten mortgage terms, however.

Appliances: Number intending to buy is about the same as a year ago for most major items. Fewer consumers said they plan to buy television sets.

Autos: About the same number as in June, 1954, intend to buy.

Economists who ran the survey conclude: "The momentum generated during the past few months appears to carry over to the near future."

Stock-market followers can get some insight from the consumer survey.

Well-to-do consumers, who are the ones most likely to invest in stocks, are more optimistic than the general public and more inclined to expect long-term inflation, with prices being higher five years from now.

Hedging against inflation is one motive for buying stocks, of course. It helps explain why investors are choosing common stocks that pay a very low rate of return, in preference to bonds that sometimes pay as much or more.

Average return on "blue chip" industrial stocks is 4.0 per cent; on high-grade corporate bonds, 3.08 per cent; on tax-free municipal bonds, 2.64 per cent. Advantage of stocks for current income is less than in the bull market of 1946.

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1955

REPUBLICANS DEBATE IKE'S POLICY: "SUCCESS" OR "FAILURE"

Argument is starting inside the Republican Party over President Eisenhower's try at friendship with Communist leaders.

The fight broke out during closing days of the Senate session. Joseph McCarthy, Wisconsin Senator, attacked Mr. Eisenhower for accepting what the Senator described as "defeat" at the hands of the Communists.

Other Republicans, led by William Knowland, Senate Republican Leader, jumped to the President's defense. They insisted that Mr. Eisenhower had given up nothing in his talks at Geneva.

What follows is from the transcript of the debate on the Senate floor over the new line in U. S. policy.

Following are extracts from the transcript in the "Congressional Record" of the debate on the floor of the Senate, Aug. 1, 1955:

Senator McCarthy [Senator Joseph R. McCarthy (Rep.), of Wisconsin]: Mr. President, on June 16, and again on July 11, I discussed at some length the prospects for the Big Four Conference. I took the position that the decision to attend a "summit" meeting was ill-advised—that it meant, inevitably, a free-world defeat. For reasons that are on the record, and thus need not be recounted here, I argued that no matter what form it took—territorial concessions or propaganda gains—the Communists would have the victory. I must now confess that the views expressed in those addresses were overly optimistic. I predicted a free-world setback, but I did not foresee a rout. I foresaw serious breaches in the anti-Communist front, but I did not and I could not anticipate its total disintegration.

My critical mistake was to assume that after Geneva had failed our Government would recognize and acknowledge that it had failed. I assumed that after Soviet leaders had dashed the world's hopes that Communism had mellowed and had abandoned its goal of world conquest, we would recover our balance and embark once again on a course of dedicated opposition to our mortal enemy. I thought that it would take some time to pick up the pieces, and to repair the free world's position; but I did not reckon seriously with the possibility that the myth of Communist reformation would not only be alive and flourishing after Geneva, but that its foremost exponent would be the Government of the United States.

True, the West made no specific territorial concessions at Geneva—so far as we know. But the Communists had set their sights on far more ambitious goals than the surrender of this Western outpost, or the neutralization of that one. The Communists set out to crack the West's will to resist, and in this—for the moment, at least—they have been utterly successful.

Far better that we had lost only territory. The outlook would be brighter had the Big Four meeting been a replica of last year's Geneva Conference, where we made concessions—specifically, half of Indo-China; but where afterwards we felt the sting of defeat and thus were bestirred to make new resolves to turn back the forces of evil. Better that the West lose some land, as it did then, than to lose its soul, as the West is perilously close to doing today.

To grasp the magnitude of the Geneva disaster, we need only to state the argument of those who claim Geneva was a success—namely, that "we have made friends with the Soviet Government." For this is another way of saying that we have made friends with the apostles of hell.

We have, indeed, made friends with the Soviet leaders—who denounce God; who despise freedom; who deny individual rights; who exalt treachery; who counsel deceit; who practice terror, intimidation and torture as part of each day's work; who have, where possible, exterminated every human being and every human institution that has opposed them; and who have acknowledged, as their supreme mission, the destruction of this country and the last vestiges of our way of life. Such men are now our very good friends.

So far as I know—and over the past week I have made a point of canvassing the subject—not a single speech, news column, editorial, or magazine article that has hailed Geneva as a success has failed to make the judgment, expressly or implicitly, that friendship with Communists is a good thing. Over the past years, in dealing with the subject of Communism, I have found that a great number of things had to be said, or explained, that seemed to be elementary; but I never once felt that it had to be seriously argued that friendship with Communists is wrong. Now, in the wake of Geneva, this not only has to be said, but it can be said only at the price of being considered a reactionary, spoilfun eccentric.

Yet, Mr. President, is it not still self-evident that hostility to the Soviet Union—overt, articulate, unyielding hostility—is both necessary and desirable? We must be hostile to the Soviet Government for the same reason that truth is hostile to falsity, that freedom is hostile to tyranny, love to hate, and kindness to brutality—for the same reason that good is hostile to evil. Good cannot clasp the hand of evil without becoming evil, and without inviting destruction by evil. We cannot offer friendship to tyrants and murderers, as has the President of the United States, without advancing the cause of tyranny and murder.

It is the measure of the West's moral degeneracy that the friendship cemented at Geneva has been heralded not as a harbinger of evil days ahead but as proof that things are getting

. . . McCarthy: "President's faith in Reds' sincerity astonishing"

better. Only by thinking long and hard about this verdict is it possible to appreciate the depths to which we have fallen.

President Eisenhower's announcement that our Government has made friends with the Kremlin leaders would have a precedent if the mayor of Chicago had publicly proclaimed in the early '30s that his administration had made friends with the Capone mob.

The moral implications of Geneva are shocking enough; but its practical consequences are just as grave. The Geneva friendship pact has already caused complacency and a false sense of security here at home. It is only natural that we relax our vigilance when we are told that our enemies are not such bad folk after all. Today the disintegration of the anti-Communist front is of the spirit. Before long it will affect armament and mobilization. Why foot huge tax bills, the American people may begin to ask, when the Communists have abandoned their plans for world conquest?

• • •

Reds Proposals "Unacceptable"

The truth about Geneva is that it did not produce one scrap of evidence that the Communists had budged from their objective of world conquest. Every proposal made by the West the Communists either rejected or ignored. Every proposal made by the Communists had been made, in substance, a hundred times before—and a hundred times had been unacceptable to the West.

Let us go down the list.

On Germany: We insisted on German unification, and on Germany's right to remain in the Western Defense Alliance if she so chose; the Communists refused to agree to unification, and demanded that Germany withdraw from NATO [North Atlantic Treaty Organization].

On European security: We said we would not join the Russians in an over-all European security pact until Germany had been unified; the Communists demanded such a pact immediately and refused to proceed with German unification.

On disarmament: The West once again asked for a reliable system of inspection; the Communists refused to agree to such guaranties, and insisted that both sides disarm, each side trusting the other to play fair.

On East-West contacts: The West requested, in effect, that the Soviets haul down the Iron Curtain, the Iron Curtain is still there and shows every sign of being permanent.

On freedom for the satellite countries: The President said he would like to discuss the question; the Communists refused, denying even the existence of a problem.

On international Communism: The President brought up the subject; the Communists scoffed at the idea, called it an internal matter and, therefore, an inappropriate subject for discussion.

On the Far East: While the American people were led to believe the subject did not come up at Geneva, we now know it was discussed in secret meetings, where—let us hope—the United States argued that Communist aggression should cease; the Communists, we may be sure, renewed their demands for Red China's admission to the United Nations and for the surrender of Quemoy, the Matsus and Formosa to the Communists. And on this subject, it is beginning to look as though the Communists not only stood firm, but that we gave ground.

• • •

To my mind, Mr. Eisenhower's profession of faith in the Communists' sincerity was the most astonishing statement ever uttered in public by a President of the United States. One would have expected the American press, had it still a sense of responsibility, to have heaped ridicule upon the President's head. Instead, the reporters and the columnists relayed the statement to the American people with the strongest implications that it was a carefully weighed, level-headed judgment, thoroughly warranted by the facts. The only thing to be regretted about the statement, the press observed, was that it might get the President into trouble with unimaginative politicians back home.

• • •

. . . When Franklin Roosevelt and Harry Truman offered similar appraisals of Soviet intentions, in the heyday of our alliance with Russia, the Republican Party denounced such foolishness in rounder terms than I am using today. Since Democrats have a President who thinks the way they do, and Republicans a President who, they feel, is indispensable for keeping their party in power, the number of protests can be counted on the fingers of one hand.

So as to this first American objective, that of enlightening the President about Communist objectives, it must be said that the Conference not only failed to enlighten him, but cemented his delusions and spread them to others.

Nor did our second objective—that of bowling over the Russians from positions of strength—fare any better. We heard a great deal of talk before the Conference began to the effect that Russia was weak, that her economy had collapsed, that her empire was falling apart, that she was thus prepared to make concessions to the West in order to keep going. Secretary Dulles suggested we would be able to drive a hard bargain at Geneva, and could wrench some concessions from the Communists.

The first day of the Big Four meeting demonstrated how pathetically wrong Mr. Dulles had been. The President made a stab at starting up a discussion of issues regarding which the Communists might make concessions—those of the satellite countries and international Communism. In practical effect, the Communists simply laughed in his face; our delegation then dropped the subject like a hot potato. Neither were the Communists impressed with our strong positions when the subject of Germany came up. And so on down the line.

Mr. Dulles' highly touted policy of negotiating from strength never got off the ground at Geneva. Today, it is utterly bankrupt. Not even State Department propagandists have dared suggest that in the coming negotiations with the Chinese Communists we are dealing from a position of strength.

• • •

Ike's Friendship With Zhukov

While I am on this subject, I think it is finally time to say a word about the relationship between the President and Marshal Zhukov [Georgi Zhukov, Soviet Defense Minister]. If Dwight Eisenhower were a private citizen, his friendship with a Communist might be nobody's business but his own. But he is not. He is the President of the United States; and, as such, ought to have a decent regard for the feelings of his countrymen. Marshal Zhukov may have been Mr. Eisenhower's wartime "buddy," a comrade in arms, and all that; but it remains that he is a leading member of a ruthless cabal that holds one third of the world's peoples in chains, and that, to boot, is determined to destroy the United States.

It goes without saying that Marshal Zhukov would not be where he is today, did he not support Communism wholeheartedly and did he not possess the measure of deceit, treachery and brutality that qualifies for membership in the Commu-

. . . Knowland: "I deny we are selling out our Asian allies"

nist high command. The argument that, through Zhukov, we have a pipeline to the Kremlin is sheer nonsense. Zhukov is not going to tell the President anything the Communist leadership does not want him to know. Moreover, the sort of thing that Zhukov is likely to tell the President is the sort of thing the President should hear less of, not more.

Before I am berated for making an issue of the Eisenhower-Zhukov relationship, let me ask those who would berate me what they would have said and written had Franklin Roosevelt concluded a pact of mutual trust and friendship with, say, Hermann Goering or Joseph Goebbels.

• • •

Island Negotiations "Probable"

Last Monday, the President assured us that there were no secret agreements—either written or otherwise—at Geneva. We were also led to believe that the Far Eastern situation was not discussed. But on Wednesday, Prime Minister Eden told the House of Commons that the Far Eastern crisis had been discussed in the secret Big Four meetings. What was decided in those secret meetings, we do not know. But in the light of the State Department announcement—coming, as it did, right after Geneva—of talks with the Chinese Communists on the question of a cease-fire in the Formosa Straits, it is highly probable that the President agreed with the Communists to negotiate about Quemoy and the Matsus.

• • •

Whatever agreement about the Far East was reached in Geneva, it is clear that the campaign to sell out free China is under a full head of steam. The Administration has already gone back on its solemn promise to Chiang Kai-shek not to negotiate on questions dealing with the rights and territories of the Republic of China without the participation of the free Chinese. The Administration does not want Chiang's representatives at those talks, for the understandable reason that they would oppose the Administration's plans. Once Quemoy and the Matsus are lost, the Republic of China will be effectively neutralized and there will no longer be any realistic hope of having Chiang return to the mainland—a fact the Administration knows only too well.

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Senator Knowland [Senator William F. Knowland (Rep.), of California]: Mr. President, I hope we can get on with our legislative business. However, I feel that one or two remarks should be made at this time. I make them on my responsibility as the Minority Leader of the Senate, who has been in contact with the highest sources of the Government, including the President of the United States and the Secretary of State.

I am assured by such sources, in a categorical manner, that no deal has been made regarding the offshore islands in exchange for the 11 prisoners of war. I believe the categorical statements which have been made to me.

I deny, on behalf of the Administration, that we are selling out or trading out our Asian allies and those with whom we have mutual-defense pacts, or that we will negotiate their sovereignty, their independence or their people in any such nefarious deal as has been indicated.

I wish to say, on my responsibility as a Senator of the United States, and as the Minority Leader of this body, that in my judgment such action, if taken, would be an act of national dishonor and a betrayal of our national pledged word. In my judgment such action would ultimately and overwhelmingly be repudiated by the vast majority of the American people.

Senator McCarthy: Mr. President, will the Senator yield?

Senator Knowland: I do not care to enter into any further discussion. I have made my statement. The Senator has made his.

Senator Mundt [Karl E. Mundt (Rep.), of South Dakota], . . . I should like to associate myself with the remarks which have just been made by the Minority Leader, because in my opinion he reflects more accurately the world situation as it exists today than it was reflected in the speech addressed to us by the Senator from Wisconsin.

Senator McCarthy: Mr. President, will the Senator yield for a question?

Senator Mundt: I wish to say a word or two at this time. The reason I make that statement is that I think the dangers envisioned by the Senator from Wisconsin stem from a false assumption on his part to the effect that the President of the United States has suddenly adopted the premise that the word of the Communist international conspiracy can be trusted and taken for granted. If that assumption were correct, I could follow the remainder of the Senator's logic to its conclusion. However, I see nothing in the record, I see nothing in the character of the individuals involved, I see nothing in any of the implications at Geneva which could lead one to the conclusion that the President of the United States has suddenly decided that the word of international Communism, unsupported by act and unsupported by performance, can be trusted.

Senator McCarthy: Mr. President, will the Senator yield?

Senator Mundt: Not at the moment.

On the other hand, I see a great deal of evidence to the contrary. I think it would be unfortunate if, on this last day, or in the closing days of the session, word were to go out to the country that Senators, in the main, felt that the Geneva Conference had been the kind of failure which the Senator from Wisconsin believes it to have been.

I consider it a success. If for no other reason, I would consider it a success on the basis of a telegram which I received from a Western rancher friend of mine when the so-called summit conferences had been concluded. He telegraphed to me, "Hurray. Ike came home with his shirt."

If nothing else had happened, that would have made the Conference a success, because for the first time in history we had met the Communists in conference and had given nothing away. There were no concessions to Communism. There were no surrenders. There were no appeasements.

On the other hand, I think whatever achievement was made in the direction of a meeting of minds was an achievement in the direction of strengthening the free world and weakening the Communist part of the world. This is the first international conference held with Communists in which the Western world has held the initiative from the beginning to the very end. For that, President Eisenhower merits tremendous credit.

What Geneva "Publicity" Did

I do not think anyone can deny that the publicity stemming from this Conference was publicity which, from the standpoint of the unknowing people in various parts of the world, or from the standpoint of neutralists around the world, clearly indicates that the United States is not a warmonger. It clearly indicates that the United States is not a *provocateur*. It clearly indicates that the United States is a leader in the direction of trying to bring peace to the world.

If the Communist propaganda could be successfully utilized, it would picture us as a sort of secondary Mars, or god

. . . Mundt: "The acid test will come in October"

of war. I think the publicity stemming from that Conference is valuable to the cause of peace, and of immense value to the free side of the world. It does great credit to the noblest peace traditions of the United States of America.

Senator McCarthy: Mr. President, will the Senator yield to me?

Senator Mundt: Not at the moment.

Senator McCarthy: Will the Senator yield for a brief question?

Senator Mundt: I yield for one question.

Senator McCarthy: It has to do with something the Senator has said.

Senator Mundt: I yield for one question.

"The Overriding Question"

Senator McCarthy: Does the Senator agree with the President when he says—and I think I quote him—"I believe the Soviet leaders sincerely want peace"? Or does the Senator agree with me, that the Soviet intentions and designs are to conquer the world? That is the overriding question. Either the Senator agrees with the President when he says the Soviets are seeking world peace, and have abandoned their aim of world conquest, or—as I think he does—he agrees with me when I say there is nothing to indicate that the Communists have changed.

Senator Mundt: I am happy to answer the Senator's question. He narrows the issues down to altogether too small a corridor for the realistic type of world in which we are living. I do not believe that we are faced with a choice between agreeing with the suggestion that the Soviets have suddenly declared themselves as searching for peace on a sincere basis, and, on the other hand, that the Soviets continue to seek some sort of military world conquest in order to establish their supremacy. I believe, as I have always believed, that the Communist conspiracy remains the same as it has always been. It is dedicated to the utilization of intrigue, subversion, and perversion to accomplish its unholy ends. Whether or not it is dedicated to a warlike effort is, in my opinion, highly doubtful, because I think the Soviets are realistic enough to know that if they were to engage us in world conflict, while they could make a shambles of civilization, that would never make for a victory by the Soviets.

Senator Potter [Senator Charles E. Potter (Rep.), of Michigan]: Mr. President, will the Senator yield?

Senator Mundt: I yield for one question.

Senator Potter: Does the Senator agree with me that when a person or a nation is strong, he or it is not afraid to sit down and negotiate any question?

In other words, it is only when a person or a nation is weak that such a person or nation is inclined to shy away from talking or negotiating with a so-called opponent. Is that not correct?

Senator Mundt: I believe there may be something to that thought. However, primarily, it is a matter of motivation. The question is whether we go there to explore the other fellow's thinking and to defend our own point of view, or whether we go there to concede to the other fellow's point of view. I see nothing anywhere indicating that the United States and the free world made any concessions to Communism at Geneva. What concessions were made at the moment are not substantial, but they were all made in our direction.

All of us are speaking as prophets, not as historians, when we talk about the Conference at the summit here today.

The acid test will come in October. The acid test of the degree of validity or invalidity of the remarks made by the junior Senator from Wisconsin and by the rest of us will stem from the outcome and the ramifications of what occurs when the Foreign Ministers meet in October.

If at that time there is no constructive good achieved, if at that time concessions injurious to the free world are made, then certainly the junior Senator from Wisconsin will have made some pertinent points.

However, if, as I suspect and hope, we will maintain at the October meeting our same position of strength and our same relentless reluctance to make concessions or to appease Communism, I am sure that even the Senator from Wisconsin will have to re-evaluate his interpretation of the outcome of the Conference at the summit.

Senator McCarthy: Mr. President, will the Senator yield?

Senator Mundt: I yield for one more question. Then I shall desist, not because the discussion is not one of great merit and importance, but because I do not wish—and I am sure the Senator from Wisconsin does not wish either—to interfere with the orderly business of the Senate as it seeks adjournment.

Senator McCarthy: I have one all-important question to ask of the Senator from South Dakota. Does he not think that rather than to have reported to the world—including that part of the world enslaved by the Russians—that everything at Geneva was peaceful, and that Communist intentions were peaceful—President Eisenhower should have emphasized the fact that the Russians did not give in an inch at Geneva; that when he talked about international Communism they laughed in his face; that when he asked for discussion of the satellites the Russians said, "No"; that when he called for unification of Germany the Russians again said, "No"?

Should he not have admitted to the American people that we discussed the Far East, and Russia has not given in one inch? Should he not have made it crystal-clear that there is no indication that the Soviets have abandoned their ambition of world conquest? Would not that have been the correct emphasis for the President's report?

Geneva: "Movement Toward Peace"?

Senator Mundt: I am not sure to which radio broadcast about the President's speech the Senator is referring. If it is the short report on television and radio made from the White House by the President in person on his return, I am afraid that I do not remember every phrase and every syllable and every statement made by the President. However, I do not remember that the President said in that statement that the United States felt the Russians had changed. I believe he expressed the hope that there was a realistic change. I believe he said there was hope that at the forthcoming Foreign Ministers' conference there would be justification for the conviction that a change had taken place.

I do not believe the President indicated that the peace intent and hope and prayer of the Western world would of certainty be fulfilled. In fact, he was very cautious and conservative in his report. But he did indicate that some progress in the right direction had been made.

I insist again that the test should be applied in October. Then we will be able to say whether at Geneva we set in motion a movement toward peace throughout the world, or whether we set in motion a movement which will bring about some of the fearful things the Senator from Wisconsin envisions. I hope and believe the Senator is wrong in his pessimism.

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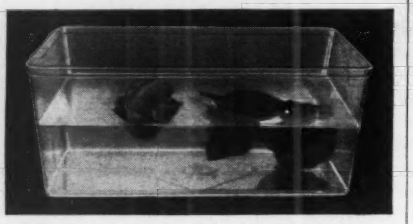

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FROM JAPAN

10 YEARS AFTER

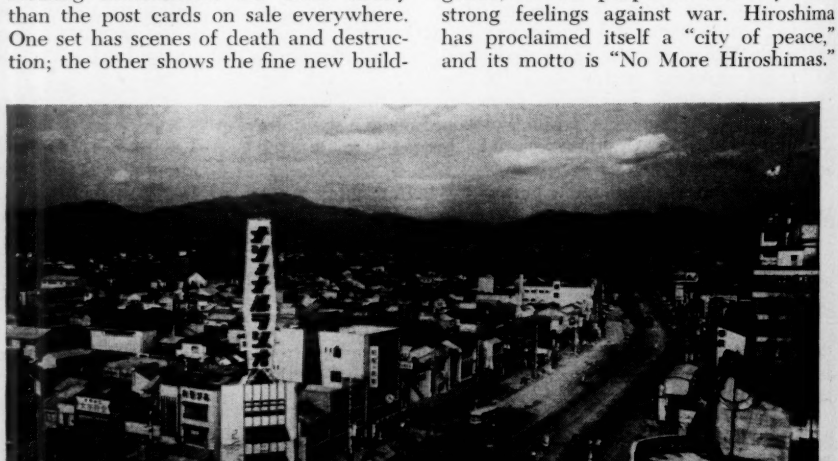
HIROSHIMA—An American driving or walking through Hiroshima may find it difficult to realize that on an August morning just 10 years ago this city had bestowed on it the dubious distinction of being the first in the world to be destroyed by an A-bomb.

Hiroshima in 1955 resembles many another Japanese city. The wooden houses built since the blast have weathered and already look old. The people seem prosperous and well-fed. The shipyards and oyster canneries hum with activity. And the population is about 360,000, the same as it was before the bombing. More than two thirds of the residents are newcomers.

Stay in Hiroshima for a day, however, and you realize that the city faces in two directions—the past and the present. Nothing demonstrates this more clearly than the post cards on sale everywhere. One set has scenes of death and destruction; the other shows the fine new buildings of the Peace Memorial Center, a lovely park and a thriving shopping center.

Any Hiroshiman who survived the bomb can tell you just where he was at the moment of the explosion. Those who were within two miles explain how the railway station or a pile of straw mats happened to be between them and the blast, saving their lives.

"City of peace." Ten years after the instant that brought tragedy and fame, Hiroshima is aware of its place in history. A few people make political capital out of this. Every year, the anniversary of the blast is the occasion for impassioned pleas for everything ranging from peace to an American promise to stop testing H-bombs. The Communists have an easy job putting over their "peace" propaganda, for the people of this city have strong feelings against war. Hiroshima has proclaimed itself a "city of peace," and its motto is "No More Hiroshimas."



—United Press

HIROSHIMA TODAY: NEW STORES, BUSY STREETS
. . . and a memorial with the names of 60,000 dead

Hiroshimans realize that the city is a tourist attraction, although it is 18 hours by train from Tokyo and inconvenient to reach by air.

Emphasis on the "city of peace" theme is evident in the general area that was below the center of the explosion. Here stands the Peace Memorial Center, a park built around a simple concrete shelter protecting a tomblike structure that contains the names of the 60,000 killed by the bomb. Nearby are a modern auditorium, a new Western-style hotel and a museum built to house relics of the explosion—bamboo trees charred on one side, a seared uniform, a series of horrifying pictures of victims.

Elsewhere in the city you can see other new buildings—among them the Peace Memorial Church, which is Roman Catholic, and the Children's Library, designed to suggest an atomic mushroom cloud and paid for by Californians of Japanese descent.

What of survivors? The people you see on the streets look normal. The scarred survivors keep to themselves, and there has been criticism because the disfigured and disabled are not taught to help themselves.

Americans who live and work in Hiroshima see few signs of bitterness toward themselves. At the offices of the Atomic Bomb Casualty Commission, where studies are made of 6,000 survivors who were within 1.3 miles of the blast, and of their children, the patients look cheerful and healthy. Most of them are just there for checkups, rather than for the treatment of acute ailments resulting from the explosion.

Records that the Commission keeps up to date are the only means of measuring, among human beings, the after-effects of an atomic explosion or radiation. As a result, the ABCC is falsely charged by many Japanese and a few Americans with being interested in the victims only because they can be used as "human guinea pigs."

Americans criticized. Some Japanese also joke bitterly that the collection of Quonset-type buildings housing the American and Japanese technicians of the ABCC "looks down on" Hiroshima. It is true that the headquarters stands on the highest hill overlooking the city, but the site was chosen by the Japanese.

The ABCC is sniped at also for refusing to publish "findings" on the "possible" genetic effects of radiation. Most of the ABCC technicians have rather strong personal opinions about mutations and the question of whether there are harmful effects of any kind from radiation. As scientists, however, they do not believe they have collected sufficient facts at Hiroshima to make a valid judgment either way as to what will happen to second and third-generation children of survivors of an atomic explosion.

Joy Limberollers are unique suspension idlers for belt conveyors. They consist of neoprene discs molded on flexible steel cable... a simple, give-and-take design that gives *exceptional* length of life. Only one bearing at each end—up out of the dirt.

On abrasive or corrosive jobs, a service life of ten or more times that of conventional idlers is not unusual. Witness the magnesium foundry where Joy Limberollers have operated since February, 1953 ... and are still going strong! Compare this to the three-month life of the conventional idlers formerly used, *then figure the saving!*

For details on this modern, *new* solution to an old belt-conveyor problem, write for Bulletin LD-103 to ***Joy Manufacturing Company, Oliver Building, Pittsburgh 22, Pa.*** In Canada: *Joy Manufacturing Company (Canada) Limited, Galt, Ontario.*

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WHERE PROFITS ARE GAINING MOST

Steel, Railroads, Autos Among the Leaders

Another measure of prosperity: Profits keep going up, will set a five-year record in 1955.

Dividends are the biggest ever, promise to wind up 600 million dollars above the 1954 record.

Profit boom shows up in four out of every five corporations.

Railroads lead the field in gains over last year. Other big gainers: steel, textiles, autos, building materials.

Profits of U. S. business are surpassing all expectations. In the first six months of 1955, corporations earned money, after taxes, at a whopping annual rate of 20.8 billion dollars. In the remaining six months of the year, earnings are expected to rise even higher.

For 1955 as a whole, it now appears that after-tax profits of corporations will reach 21.1 billions.

This will make 1955 profits 24 per cent above those of either 1953 or 1954, and second only to the record profits of 1950, during the Korean-war boom.

Stockholders, as a group, will have the best year ever. Dividends are expected to hit a new high of 10.6 billion dollars in 1955. This is 600 million above dividends of 1954, itself a record year.

Better than expected. These latest estimates of profits and dividends, prepared by the Economic Unit of *U. S. News & World Report*, reflect new official figures on business activity, industrial output and national income, all higher than expected. They also reflect near-record earnings in the first half of the year, as shown by semiannual corporate reports.

In the chart on page 101, you get a generous sample of U. S. corporations, showing what happened to profits in the first six months of 1955, compared with the same period of 1954.

Profit trends vary widely from one industry to another, from one company to another. Out of 52 companies shown in the chart, all but six report some gain in earnings over 1954. These gains range all the way from three-tenths of 1 per cent to 800 per cent.

In the midst of all this prosperity, some companies are in trouble. Dun & Bradstreet, Inc., notes that business failures so far in 1955 are fewer than in 1954 but somewhat more numerous than in 1953. A committee of Congress reports, with some concern, that a number of automobile dealers have been forced out of business.

By and large, however, 1955 is turning out to be a year of high prosperity for U. S. business.

A new study by the First National City Bank of New York, covering 734 companies in 26 industries, shows a 31 per cent gain in earnings during the first half of 1955 above the same period of 1954. Four out of five of these companies reported increases.

The biggest gain of all, on a percentage basis, showed up in railroads. Forty-six rail companies combined chalked up an increase of 77 per cent in first-half earnings. Pennsylvania Railroad Company showed a profit of 20.9 million dollars in the first half of 1955, compared with 2.3 million a year earlier.

Iron and steel companies did almost as well, with a gain of 74 per cent. U. S. Steel Corporation, the biggest of these companies, earned 89.5 per cent more in the first six months of 1955 than in the same period of 1954.

PROFITS APPROACH AN ALL-TIME HIGH

	PROFITS AFTER TAXES	DIVIDENDS	RETAINED PROFITS
1948	$20.3 billion	$7.2 billion	$13.1 billion
1949	$15.8 billion	$7.5 billion	$8.3 billion
1950	$22.1 billion	$9.2 billion	$12.9 billion
1951	$18.7 billion	$9.1 billion	$9.6 billion
1952	$16.1 billion	$9.0 billion	$7.1 billion
1953	$17.0 billion	$9.3 billion	$7.7 billion
1954	$17.0 billion	$10.0 billion	$7.0 billion
1955 (est.)	$21.1 billion	$10.6 billion	$10.5 billion

Source: Through 1954, Commerce Dept.; 1955, estimates by USN&WR Economic Unit

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Textile and apparel companies, after a severe and prolonged depression, bounced back with a 70 per cent gain.

Automobile manufacturers, as a group, registered an increase of 65 per cent in profits. General Motors alone earned 661 million dollars in the first half of 1955. That compares with 425 million in the first half of 1954. Chrysler earned 70 million, against 15.8 in the first half of last year.

Companies producing building materials are cashing in on the construction boom. Thirty-eight stone, glass and cement companies showed a combined gain of 47 per cent in profits in the first six months of 1955.

Mining and quarrying companies, as a group, reported a 59 per cent gain.

Other big increases are reported—38 per cent in tires and other rubber products, 30 per cent in chemicals, 22 per cent in drugs, soap and cosmetics, 21 per cent in retail and wholesale trade, 22 per cent in telephone and telegraph companies.

Declines in profits show up in food products, radio-television and electrical equipment, machinery, railway equipment. Few companies report sharp drops.

A look ahead. Business is expected to stay good through the remainder of this year and at least the first half of 1956. This suggests a continuing climb in profits and dividends.

It is possible, though not yet certain, that corporations will be given some federal tax relief in 1956. The present maximum rate of 52 per cent has been extended until next April 1. If this rate were to drop to 47 per cent on that date, as now scheduled by law, the effect would be to add nearly 2 billion dollars a year to after-tax profits. This assumes before-tax earnings at about the present level.

Taxes now take 50 cents out of every dollar of corporate earnings. This figure is for all corporations as a group, including the smaller ones that pay less than the maximum federal rate of 52 per cent.

Whether taxes go down or not, stockholders stand a good chance of getting more money in dividends next year. Except for the Korean-war years of 1951 and 1952, dividends have increased every year since 1942. In years when profits have declined, corporations have reduced the amount plowed back into the business. Dividends, even in such years, have held high.

Stockholders in some troubled companies will not share in the general uptrend. Competition in a good many lines is fierce. Costs are rising. Some companies are finding profit margins squeezed.

Still, for the great majority of businesses and stockholders, times are good, and will stay good for a considerable period ahead.

PROFITS: BIG GAINS FOR MOST COMPANIES

(Net earnings, after taxes)

Company	1954 (1st Half)	1955 (1st Half)	Percentage Change
General Motors	$425,250,383	$660,961,942	UP 55.4%
Standard Oil (N. J.)	$293,000,000	$344,000,000	UP 17.4%
Texas Co.	$97,480,845	$124,834,043	UP 28.1%
Standard Oil (Calif.)	$104,043,923	$109,342,748	UP 5.1%
Socony Mobil Oil	$88,000,000	$97,000,000	UP 10.2%
Shell Oil	$63,435,549	$54,497,284	DOWN 14.1%
Phillips Petroleum	$37,918,723	$42,575,770	UP 12.3%
Sun Oil	$20,407,464	$24,407,336	UP 19.6%
Ohio Oil	$19,493,031	$19,550,571	UP 0.3%
Atlantic Refining	$19,837,000	$18,903,000	DOWN 4.7%
Union Oil of California	$17,687,935	$16,308,664	DOWN 7.8%
U. S. Steel	$93,851,114	$177,877,960	UP 89.5%
Republic Steel	$24,791,945	$41,137,071	UP 65.9%
Armco Steel	$19,001,116	$28,020,534	UP 47.5%
Inland Steel	$19,417,669	$23,419,852	UP 20.6%
National Steel	$13,025,348	$23,032,871	UP 76.8%
Jones & Laughlin Steel	$12,147,000	$22,568,000	UP 85.8%
Youngstown Sheet & Tube	$9,070,000	$18,006,000	UP 98.5%
Bethlehem Steel	$58,558,350	$82,319,324	UP 40.6%
General Electric	$93,856,000	$101,892,000	UP 8.6%
Westinghouse Electric	$45,359,000	$29,417,000	DOWN 35.1%
Radio Corp. of America	$19,268,000	$22,061,000	UP 14.5%
Du Pont Co.	$152,150,633	$186,392,722	UP 22.5%
Union Carbide & Carbon	$41,803,203	$63,614,898	UP 52.2%
Allied Chemical & Dye	$22,694,984	$26,523,965	UP 16.9%
American Cyanamid	$13,962,842	$18,559,323	UP 32.9%
Monsanto Chemical	$11,597,710	$16,409,680	UP 41.5%
Texas Gulf Sulphur	$15,515,848	$16,939,572	UP 9.2%
Pittsburgh Plate Glass	$16,908,172	$32,562,512	UP 92.6%
Libbey-Owens-Ford Glass	$13,082,796	$20,003,633	UP 52.9%
R. J. Reynolds Tobacco	$21,383,000	$25,135,000	UP 17.5%
American Tobacco	$19,949,000	$23,282,000	UP 16.7%
National Lead	$17,569,659	$23,503,085	UP 33.8%
U. S. Rubber	$14,442,587	$19,005,463	UP 31.6%
United Fruit	$21,480,000	$18,936,000	DOWN 11.8%
Caterpillar Tractor	$12,627,907	$15,446,994	UP 22.3%
American Can	$13,070,070	$14,417,672	UP 10.3%
Douglas Aircraft	$19,178,939	$13,680,622	DOWN 28.7%
International Business Mach.	$21,600,314	$23,870,992	UP 10.5%
Pennsylvania R. R.	$2,319,315	$20,884,608	UP 800.5%
Southern Pacific Rwy.	$22,603,405	$34,452,984	UP 52.4%
Atchison Topeka & Santa Fe	$25,960,752	$33,231,392	UP 28.0%
Great Northern Rwy.	$7,112,146	$11,131,560	UP 56.5%
Baltimore & Ohio R. R.	$7,246,803	$12,645,998	UP 74.5%
N. Y., Chicago & St. Louis R. R.	$5,794,744	$7,382,690	UP 27.4%
Southern Rwy.	$11,053,491	$18,434,020	UP 66.8%
Southwestern Bell Telephone*	$26,510,488	$31,803,758	UP 20.0%
Consolidated Edison of N. Y.	$30,059,614	$31,341,451	UP 4.3%
Philadelphia Electric	$18,438,032	$19,106,133	UP 3.6%
Public Service Electric & Gas	$15,198,766	$17,049,011	UP 12.2%
Niagara Mohawk Power	$15,664,362	$16,820,402	UP 7.4%
Detroit Edison	$11,990,950	$14,456,273	UP 20.6%

*Five months to May 31.

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August 2, 1955

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NEWS-LINES

WHAT YOU AS A BUSINESSMAN ☑ CAN and ☒ CANNOT DO

as a result of recent court and administrative decisions

☑ **YOU CAN,** as an employer, sometimes refuse to go along with a union's bargaining tactics without violating the ***Taft-Hartley Act.*** In an administrative decision, the General Counsel of the National Labor Relations Board finds that an employer did not bargain in bad faith when he objected to a union's bargaining methods. The union had insisted on reaching agreement on all nonwage matters before presenting its wage demands.

* * *

☑ **YOU CAN,** as a partner in a ***hotel business*** who is required to be available for duty 24 hours a day, avoid paying an income tax on the value of meals and lodgings furnished you by the hotel. This is not taxable income according to a ruling of the U. S. Tax Court.

* * *

☑ **YOU CAN** get a formal or informal hearing before the Atomic Energy Commission on a matter involving licenses for the use of ***atomic materials*** and facilities. This is one of the provisions of rules of practice drawn up by the Commission to govern AEC proceedings. At such hearings, the Commission will consider suggestions for changes in the rules.

* * *

☑ **YOU CAN,** in planning operations of a railroad, engage in the pickup and delivery of ***"piggy back" trailers*** without obtaining certification from the Interstate Commerce Commission as a motor carrier. ICC says such certification is not necessary.

* * *

☑ **YOU CAN,** as manager of a tax-exempt organization, take steps to get ***Social Security coverage*** for your employes. Procedures are established by the Internal Revenue Service for obtaining coverage.

* * *

☑ **YOU CAN** sometimes get a State court to enjoin pickets' use of threats, violence and mass picketing in violation of a State's laws even though such conduct also would be an ***unfair labor practice*** under the Taft-Hartley law. A

State supreme court holds that the Taft-Hartley Act does not deprive a State of its power to insure the safety of every citizen.

* * *

☑ **YOU CAN,** in handling the tax affairs of an ***unincorporated business*** that has requested the Internal Revenue Service to be taxed as a corporation for the year 1954, take additional time to file information required under this decision. IRS announces that these businesses are given a "reasonable" period of time, beyond the usual 60 days, to make necessary reports.

* * *

☑ **YOU CAN** probably count on getting more ***nickel*** for your civilian production in the near future. The Director of Defense Mobilization directs the General Services Administration to make available to industry 1 million pounds of the scarce metal that had been earmarked for the August shipment to the Government's strategic stockpile. This is in addition to another 1 million pounds of nickel previously made available for August.

* * *

☒ **YOU CANNOT,** as a patent owner, bring an ***antitrust damage suit*** against the competitor of the firm having license to your patent. A court of appeals holds that a license owner cannot bring a treble-damage suit against such a competitor for royalty losses allegedly resulting from the competitor's antitrust violations.

* * *

☒ **YOU CANNOT** avoid complying with the Wage-Hour law for your workers who are employed in producing machinery and spare parts for your business's stock, if a substantial part of these products are shipped to another State. A court of appeals finds that such workers are entitled to ***overtime pay*** under the Federal Wage-Hour Act.

* * *

☒ **YOU CANNOT** export ***aluminum scrap*** in the present quarter unless a license is applied for by September 1 at the latest. This application deadline is announced by the Commerce Department's Bureau of Foreign Commerce in connection with the sharply reduced third-quarter export quota for aluminum scrap.

Conclusions expressed in these paragraphs are based upon decisions and rulings of courts and Government bureaus. In making their decisions, courts and bureaus consider many facts which, for reasons of space, cannot be set forth in detail. U. S. NEWS & WORLD REPORT, *on written request, will refer interested readers to sources of this basic material.*

This announcement is neither an offer to sell nor a solicitation of an offer to buy these securities. The offer is made only by the Prospectus.

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Copies of the Prospectus may be obtained in any State only from such of the several Underwriters, including the undersigned, as may lawfully offer the securities in such State.

LEHMAN BROTHERS

August 3, 1955.

We can't change the weather . . . but

we *have* taken many steps to make your summer visits with us pleasant . . cheerful, colorful furniture in the lobby . . showers that really work . . air-conditioned dining rooms.

Prospective visitors to New England are reminded that the completely modern Parker House with its central location, superior service and fine food, is the ideal hotel headquarters for a stay in Boston.

Parker House
BOSTON
A New England Institution
Glenwood J. Sherrard, President

You're there
. . . wherever he goes

Capture the most personal of all advertising space — your customer's pocket.

Whatever you select to fill this space becomes a part of him. Wherever he goes, *you're there* with a friendly reminder of you. Your advertising is first in his pocket in the morning, last out at night, round the clock, building preference for you.

Shaw-Barton has created exclusive advertising specialties in leather and plastic to help you win this space. Complete details in our new Pocket Plan portfolio. Ask your Shaw-Barton representative for a copy . . . or write Dept. U-85.

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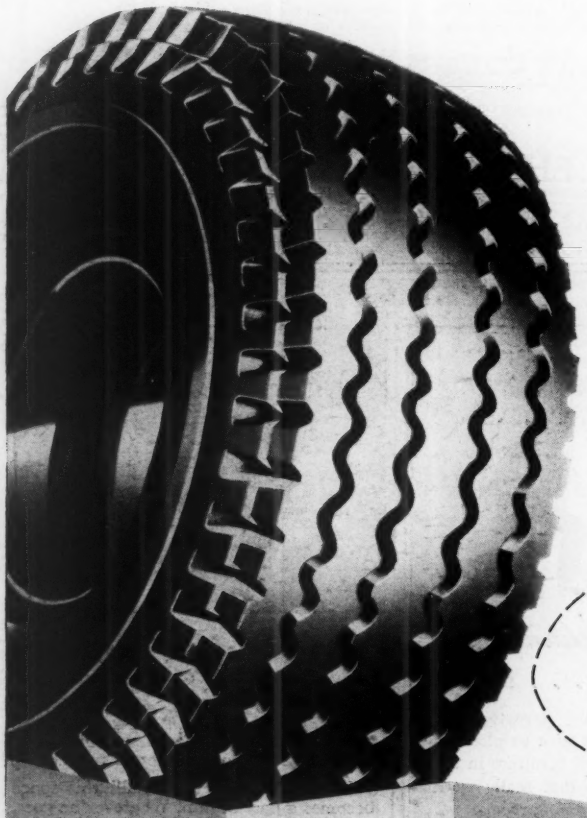

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KRAFT—THE ONE NATIONAL RECAPPING SYSTEM DESIGNED BY TRUCK TIRE MEN FOR TRUCKMEN

- ★ *Extra long mileage, top-quality materials*
- ★ *Factory-approved equipment*
- ★ *Factory-trained recappers*
- ★ *Guaranteed service Coast-to-Coast*

CERTIFIED INSPECTION
Provides full assurance that tires can be recapped safely!

ACCURATE BUFFING
Precision-done for better adhesion of tread to tire body!

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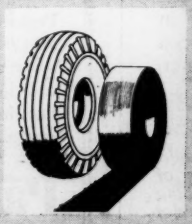

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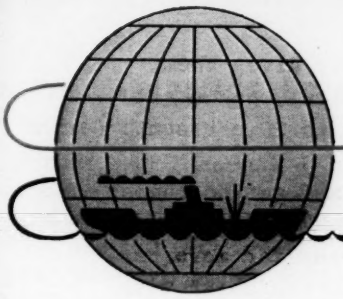

Business Around the World

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›› Taut is the word for the economic situation in much of Western Europe.

Steel is tight. Coal is tight. Labor is tight. There aren't enough freight cars. Automobile production is close to capacity. In some industries, such as textiles, there's slack. But there aren't many exceptions like that.

This tautness is largely caused by the fullness of pocketbooks in Europe. Exports are going pretty well. But that was expected, or at least hoped for. What was not expected was the extent of the home-market demand.

People have jobs and plenty of overtime pay. Lots of cash is floating around, being spent. It's driving up imports and poaching on exports.

It's a big boom that is beginning to show inflationary tendencies. Nudged along by heavy demand, prices are starting up again. That means clamor for more pay. With very few reservoirs of skilled labor left, wages are bound to go up.

Credit controls are being tightened in Britain and on the Continent. In Britain and Sweden, there are government-sponsored slowdowns on capital investment. In Western Germany and Belgium, the discount rate of the central banks has just been raised. This is a move taken earlier in the year in Britain, Norway, Denmark and Sweden. This trend in Europe is similar to the higher interest rates and credit tightening now showing up in the U.S.

›› Shortages in Western Europe create opportunities for the alert.....

American coal in increasing quantities is moving across the Atlantic, especially to Britain and Germany. Coal is so short in Germany that there is informal rationing. Now the Germans are suggesting that their large export contracts for coal to Italy and Belgium be taken over by American producers.

Polish coal again is being offered widely in Europe--at prices slightly below delivered prices for U.S. coal. Russian coal can be bought, too.

A combination of steel shortages and higher steel prices in Western Europe is bringing out offers of large quantities of quality steel by the Russians, Czechs, Poles and Hungarians. U.S. producers are so jammed with orders that they can't take much advantage of the European situation.

Shipyards all over Western Europe, especially in Britain and Germany, are crowded with construction. In these circumstances, the Poles are offering the services of their shipyards. U.S. shipyards, with little to do, are almost completely out of the world market because of their high costs.

›› The labor shortage in Western Europe should give American industry a whack at a lot of business in the future. American technology, plant layout and labor-saving machinery will almost inevitably be in great demand.

Odds favor a great outcry for higher wages this autumn and next year, as

(over)

European workers discover the new power that labor scarcity gives them.

In Germany, the metalworkers and workers in the chemical, paper and ceramics industries are already out for raises of from 12 to 20 per cent. German postal and rail workers are after more money, too.

Some British unions have already had their innings, and gotten raises this year. But it looks as if others will soon be up to bat.

Swedish workers in a few months will again be clamoring for more pay.

Dutch workers are getting restive after years of "playing ball" with industry and Government ever since the war's end.

Belgian unions, both Catholic and Socialist, are joining together and campaigning for higher wages and a five-day week.

It's a question how long French workers will be content with the small semiannual raises being given them by their Government.

The combination of labor shortages, a rising wage trend and intense consumer demand is bringing home the virtues of increased productivity and labor-saving devices to European businessmen as never before. American salesmen are quick to spot a change of this sort in European businessmen's attitude.

>> In Canada, Defense Production Minister C. D. Howe has sounded another warning on uranium buying. All uranium ore currently produced in Canada is being bought by a Government agency for the Atomic Energy Commission in Washington.

Mr. Howe announces this Canadian agency will not negotiate any more "special price" contracts for buying uranium after March 31, 1956. Special prices are premium prices above the guaranteed floor price. No Canadian company so far has been able to offer uranium at the floor price. And only three companies, not yet in production, have contracts at premium prices.

No further contracts will be made with Canadian uranium mines unless production starts before April 1, 1957.

Mr. Howe seems intent on deflating the speculative uranium boom in Canada.

>> There may be more to the recent upheaval in Argentina than just plain politics. Ten years of Perón brain-trusting have brought Argentina to a point where very large foreign loans are needed to patch up her economy.

Major export industries, such as grain and meat, need a lot done to make them competitive once more in world markets.

The peso, analysts agree, will have to be devalued drastically to bring it into line with other currencies. That will make Argentine exports cheaper in foreign markets, but imports will be more expensive.

Foreign-exchange reserves, very seriously depleted in the first half of this year, will have to be built up to more adequate levels.

>> To reorganize her economy, American observers on the spot feel that Argentina may need 200 million dollars a year for several years. Chances of getting a credit line like that are small indeed.

Meanwhile, drastic new controls are considered quite probable in Buenos Aires. These might include: further pruning of essential imports and a complete prohibition of imports of many nonessentials; rationing of raw materials to factories; no foreign-exchange or raw-material permits to new factories making luxuries; a crackdown on installment selling, which is getting out of hand.

Most of these things have needed doing for some time.

DAVID LAWRENCE EDITORIAL *(Continued from the back of this page)*

Our guilt is also the guilt of all mankind which failed to find a way to prevent war. The dispatches say Germany was working feverishly along the same scientific road and that Hitler would not have hesitated to use such a weapon against Britain. But Hitler has been killed and Germany has been beaten. Could an announcement of the tests of the atomic bomb made in New Mexico recently have been used as a dramatic means of persuading the Japanese militarists to release their people and surrender?

Surely we cannot be proud of what we have done. If we state our inner thoughts honestly, we are ashamed of it. We can justify the bombing as a means of saving precious American lives and shortening the war. Yet we cannot suppress the wish that, since we lately had been warning the people of Japan against air attack on certain cities, we might have warned them against staying in the specific area where we first wished to demonstrate the destruction that could ensue from the continued use of the atomic bomb.

All the world knows that the secrets of the atomic bomb cannot long be withheld from the scientists of nations large and small. The tiniest nation with a laboratory and certain raw materials will have a weapon that can be used to destroy its neighbors.

All nations thus will in time become equal in potential strength. The weak will stand alongside the strong demanding new respect and new consideration.

The Charter of the United Nations furnishes now an even more timely means of collaboration by all nations, large and small. New responsibility has been imposed on the larger nations which at the moment can so readily manufacture atomic bombs.

But we shall miss the entire significance of the new discoveries if we do not apply a spiritual interpretation. It is man and not God who must assume responsibility for this devilish weapon. Perhaps He is reminding all of us that man-made weapons can, if their use is unrestrained, destroy civilization, and that man still has the chance to choose between the destructive and constructive use of the findings of science.

The Challenge to Mankind

What will man say to this? Will he foolishly toy with the new weapon, build huge factories and husband supplies of atomic energy against potential enemies? Or will man see that at last there must be the greatest surrender that has been known from the beginning of time—a surrender to reason and the processes of tolerance and forbearance, a surrender to unselfishness and self-restraint, a surrender to conscience and the will of God as the only way to survive in this world?

Will man see at last how he has been exploited by the seekers of so-called glory, the power-mad militarists and domineering egotists who get possession of the reins of government, sometimes by constitutional and sometimes by unconstitutional means, while craven, submissive persons sit by and follow a course of what they deem to be individual safety?

The challenge of the atomic bomb, therefore, is plain. Since individual security can vanish in an instant, peoples everywhere must organize their national life so that no ruler anywhere, by using specious pretexts, by suppressing or intimidating the press or the radio, can seize military control of a government.

Peoples must be alert to maintain peace. Peoples must exercise the power that belongs inherently to them and must reason with each other through free governments and God-controlled statesmen.

A World of Law and Morals

The adjudication of all disputes and controversies must hereafter be submitted to tribunals and courts of justice. Man must see that only in the philosophy of Moses and Jesus, Mohammed and Confucius, who have sought in their time to teach billions of persons a universal goodness, can there be an elevation of man from the nadir of his brutality to the lofty heights that so long have been the goal of a righteous civilization.

The world of tomorrow must be a world of law and morals. Centuries of exhortation have in vain sought the same result. The world has intermittently listened. Now the world must listen incessantly or be destroyed.

There must be peace on earth and good will between factions inside nations as well as between nations themselves. Conflicts between religious sects and races must end so that our spiritual energies can be concentrated on a common purpose—the achievement of a real brotherhood of man.

For at last it has been demonstrated to all of us that only by following His guidance in our daily conduct as individuals and as nations can we hope to fulfill our true mission as the children of God on earth. It is the only road left now—the road of mutual forbearance. It is the way to survival and human happiness.

(Reprinted from the issue of August 17, 1945, of The United States News.)

WHAT HATH MAN WROUGHT!

BY DAVID LAWRENCE

(The following is a reprint of an editorial which appeared in this magazine ten years ago. The atom bomb was dropped on Hiroshima on Monday, August 6, 1945, and the editorial went to press five days later, on Friday, August 10.)

Man has at last brought forth a weapon that reduces war to an absurdity.

Man has discovered that a means of destroying whole nations is available out of the minerals of the earth and that no people can hope to remain secure against the atomic bombs of another people no matter how distant one country may be from the other.

A single airplane riding high in the stratosphere, unobserved and undetected because of its great speed, propelled by this new energy, can appear suddenly over London or Washington or Detroit or Pittsburgh or any city in a peaceful area and destroy human lives by the hundreds of thousands in just a few seconds.

No longer are armies and navies or even air forces by themselves an adequate defense.

Peoples throughout the world feel an unprecedented urge to find ways and means of avoiding war. We have been brought face to face with stark reality—that wars cannot hereafter be tolerated and that peoples must never again allow one-man governments to exploit them and drive them into war.

Greater than the atomic bomb itself is the challenge to man to rise above this new means of world suicide and to implant throughout the human race an understanding of the futility of combat and the need for removal of the basic causes of international friction.

Is This "Civilization"?

God did not provide this new weapon of terror. Man made it himself with the God-given brains and skill of the scientist. Previously other weapons like the submarine and the airplane had been introduced. We were permitted to defy the laws of gravity and fly through the air and we were permitted to move men and supplies under water. But man turned those inventions into methods of carrying on warfare more intensive and more terrible than ever.

A few decades ago man did not think it fair or sportsmanlike to attack non-combatants. War was reserved for armies and navies. Civilians behind the lines were immune. At the beginning of World War II we were horrified to see the German air forces murdering civilians in Warsaw and later at Rotterdam.

Then came reprisals. The single action of a German maniac—who by skillful propaganda appealing to those in economic distress had seized possession of the minds and energies of a whole people and had directed them along the paths of revenge and brutality—caused other nations to follow suit and bomb cities.

We—the great, idealistic, humane democracies, on the so-called civilized side—began bombing men, women and children in Germany. Last week we reached the climax—we destroyed hundreds of thousands of civilians in Japanese cities with the new atomic bomb.

A Dangerous Precedent

Perhaps these many thousands of Japanese men, women and children who were blown to bits by the atomic bombs may not have died in vain. Perhaps somewhere on this earth a scientific experiment of the magnitude we have just witnessed had to be tried and the reaction of all mankind had to be invoked to impress everybody with the indescribable horror of man's latest achievement.

Yet we had already been winning the war against Japan. Our highest officials have known for some time that Russia was planning to enter the war in the Far East as soon after V-E Day as she could deploy her troops and supplies over the long stretches of the Trans-Siberian Railroad.

The surrender of Japan has been for weeks inevitable. It has come now as anticipated. We can rejoice that hostilities are to cease at last. But we shall not soon purge ourselves of the feeling of guilt which prevails among us. Military necessity will be our constant cry in answer to criticism, but it will never erase from our minds the simple truth that we, of all civilized nations, though hesitating to use poison gas, did not hesitate to employ the most destructive weapon of all times indiscriminately against men, women and children. What a precedent for the future we have furnished to other nations even less concerned than we with scruples or ideals!

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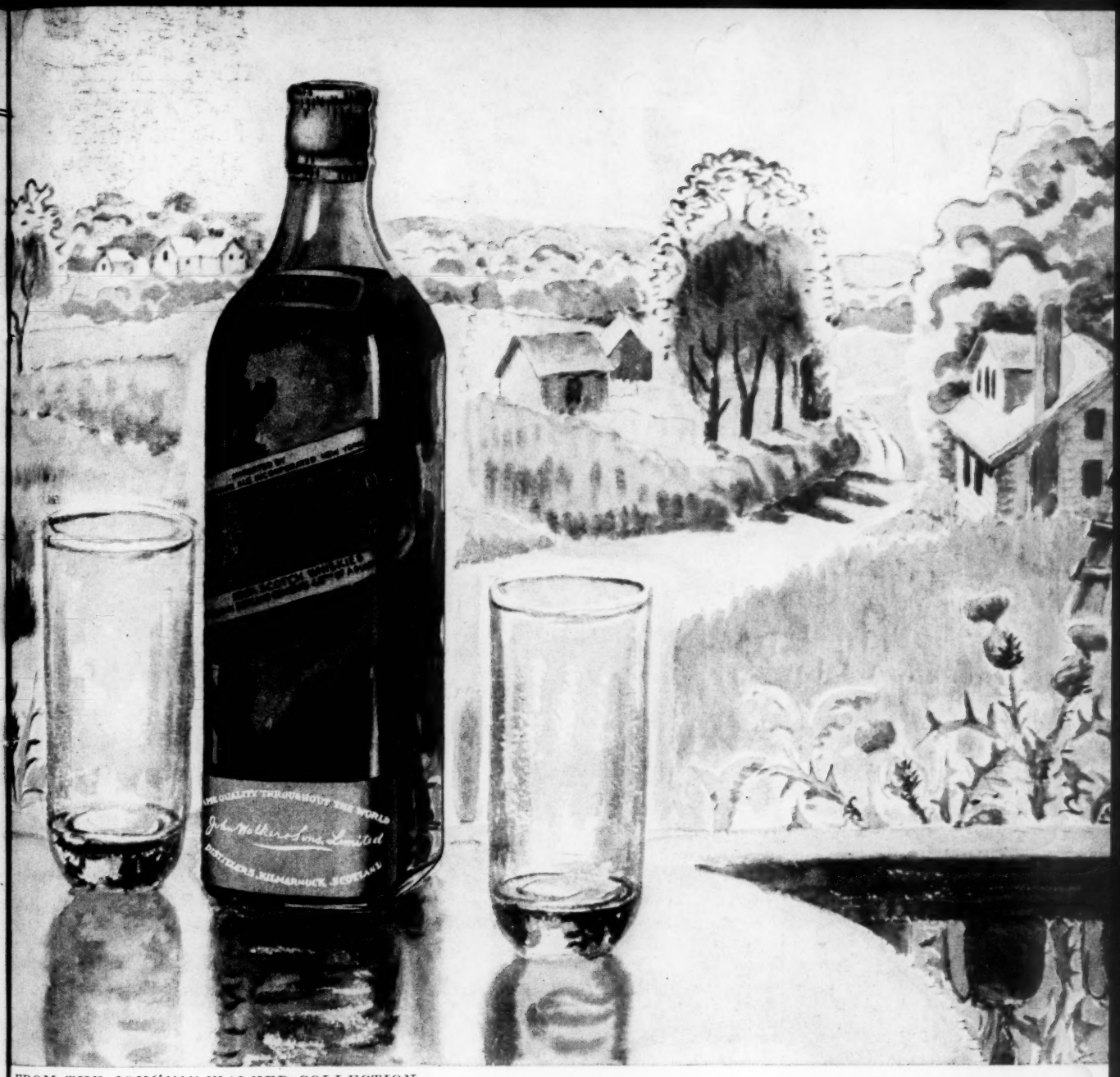

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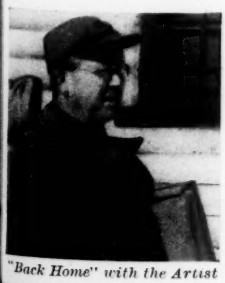

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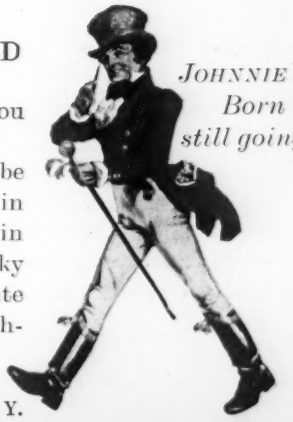

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